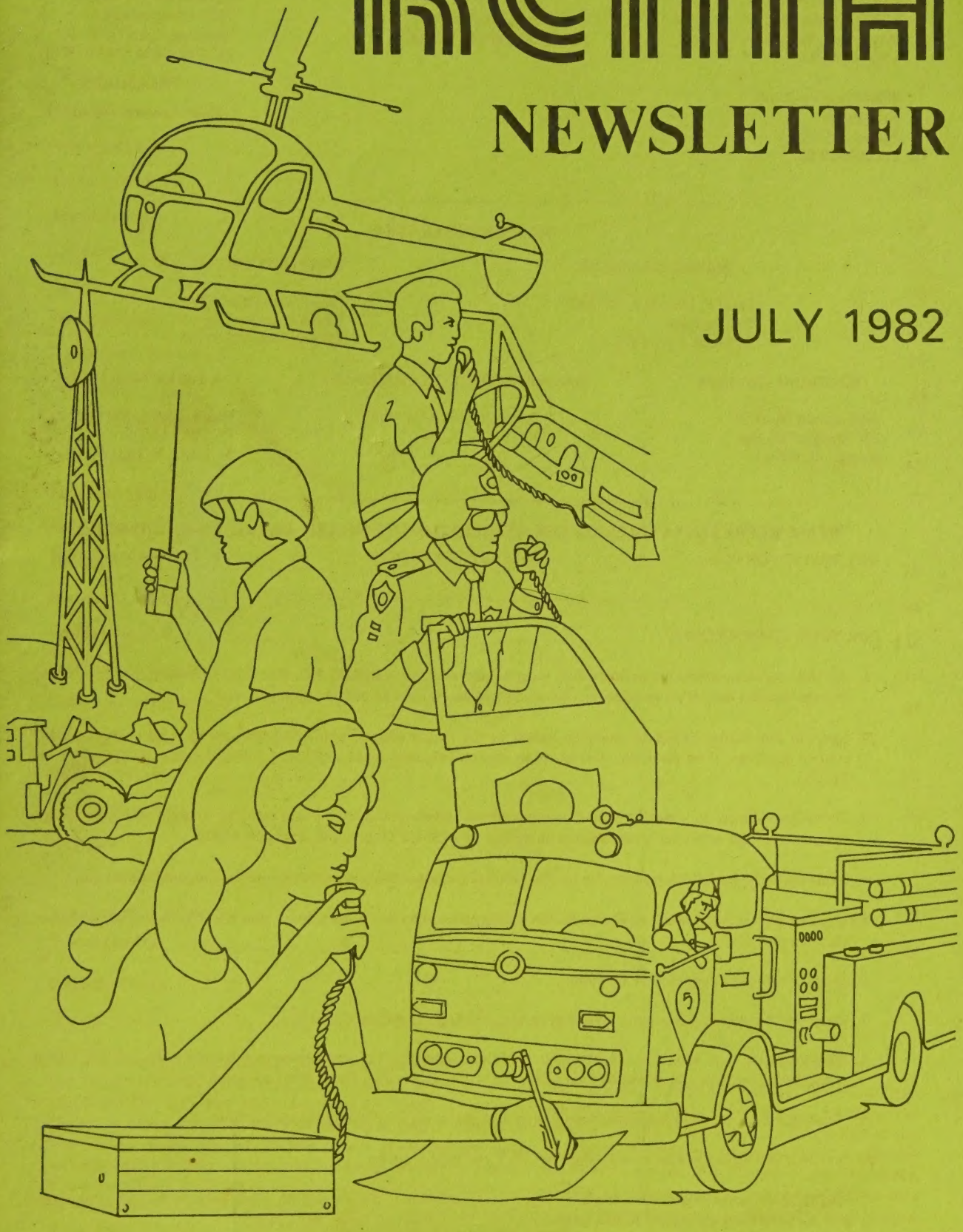
RCMA

NEWSLETTER

JULY 1982



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OF MONITOR RADIO LISTENERS

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FOR YOUR INFORMATION:

1. All club business, unless otherwise noted, must be addressed to R.C.M.A., P.O. Box 4563, Anaheim, CA 92803. This includes matters that relate to renewals, changes of address, newsletter delivery problems, etc.

2. Input to the RCMA Newsletter must be mailed to the proper editors, whose addresses are included in the individual column headlines. If no particular column seems appropriate, send input to RCMA, 1 West Potomac, Williamsport, MD 21795.

3. To forward a letter to a specific RCMA member whose address you do not know, put your message to that person in a stamped envelope with your return address on it; mail to RCMA, P.O. Box 408, Earp, CA 92242.

4. Please include your RCMA membership number with all correspondence to newsletter editors or club headquarters.

5. If you require a reply when writing to RCMA headquarters or to one of the editors, you MUST enclose a self-addressed, stamped envelope.

6. Please write on only one side of the paper.

7. Please don't combine in one letter several items that should go to different addresses.

8. If you want to type what you submit to the newsletter, please don't exceed a seven-inch column width and please single space. Doing this may save an editor from having to retype the material. Please don't use script type.

9. Your RCMA membership number and expiration date appear on your newsletter mailing label.

10. You may join or renew your membership for ONLY one year at a time.

11. The RCMA Newsletter accepts paid advertising. If you would like to place a paid ad, please write to the following address for our advertising guidelines: RCMA Newsletter, P.O. Box 13602, St. Louis, MO 63138

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The RCMA Newsletter is published monthly by members of the RADIO COMMUNICATIONS MONITORING ASSOCIATION, P.O. Box 4563, Anaheim, CA 92803. Subscription rate/membership fee is $15.00 for U.S. residents. For persons in other countries, the following rates apply: Canada and Mexico–$17.00; Europe–$18.50, South Pacific and Asia–$20.00. These dues are payable in U.S. funds and are subject to change. Information contained herein is obtained primarily from members and does not necessarily present the position or reflect the opinion of RCMA as a whole. The RCMA Newsletter editors and officers are not responsible for the accuracy or validity of information contained herein. RCMA does not necessarily recommend or endorse products or services advertised herein. The publication is copyrighted© Reproduction of any material in this newsletter is prohibited without prior written consent.

** Calendar **

Send notices of upcoming events for the Calendar section to:
John Clark, RCMA, P.O. Box 4563, Anaheim, CA 92803.
Please send notices well in advance of the Newsletter deadline.

Greater L.A. Area R.C.M.A. David A. Heywood CALA001 Presiding
--Meetings tentatively scheduled each third Friday of the month--

July 16 FRIDAY Meeting at Mercury Savings and Loan, Valley View and Lincoln, Buena Park, Ca 8:00PM. 2nd Floor. Elevator in back.

A look at below 30 MHz. Members are requested to bring their Shortwave radios. The plan is to test different units and to have discussions on techniques of monitoring two-way transmissions way down there. This will be our first look into this particular area. Should be most interesting.

August No meeting this month. Every one should make an effort to otain new frequencies for future meetings in the Fall.

Oregon- Washington RCMA Members:

This years annual get-together and scanning extravaganza will again be held at the top of Mt. Tabor park in Portland on Saturday, July 17th, beginning around noon. This will probably be the only notice given. AC power should be available. BYOB. Catering by MacDonalds.
In case of last-minute change of location, or for info/directions, call or write George DuBois, 641-2724; Wash.: call Bob, 695-8969.

R.C.M.A. Chicago

Contact Edward Robert Sirovy IL-004 312 969 2856
311 S. Williams Street, Westmont, Il 60559

Meetings: NANCINI'S Resturant 5555 St Charles Road, Berkeley, Il
two blocks east of St Charles Road exit from Eisenhouer Expressway Extention I-290 (phone 312 544 7277)

July	31	1982	Saturday	1:00 PM
September	25	1982	Saturday	1:00 PM
November	13	1982	Saturday	1:00 PM

Possible picnic in late August and tours scheduled on short notice.
A SASE on file assures notification of the extras.

R.C.M.A. Connecticut Chapter

Contact Bill Moore CT 038 203-223-0840
950 Farmington Ave, New Britain, CT 06051

R.C.M.A. Dallas-Fort Worth

Contact Mike Pruden TX 072 metro 461 2602
Larry Van Horn TN 017 642 8407
David Coursey TX 107

Regular bi-monthly meetings are scheduled the second Saturday of each odd month Tenative location

Stoneridge Homeowner's Association Clubhouse
500 Grants Parkway, Arlington, Tx (SW of Arkansas and Collins)

July	10, 1982	7:00 PM
Sept	11, 1982	7:00 PM
Nov	14, 1982	7:00 PM

For latest information and newsletter send a stack of SASEs to
Scanning Dallas/FortWorth
1111 N. Carrier Parkway #B-107
Grand Prarie, Tx 75050

The following has been extracted from Scanning Dallas/FortWorth

SCANNING

DALLAS/FORT WORTH

APRIL 1, 1982
ISSUE SIX

SKYWARN

We are planning a Skywarn storm spotting school for DFW/RCMA in early April. If you are interested in attending, call Mike at (metro) 461-2602 as soon as possible for information.

SKYWARN NET FREQUENCIES AS OF MAY 12, 1981

***DALLAS COUNTY (Uses Mapsco Coordinates)**

Primary	– 146.28	In	146.88	Out
Back-Up	– 146.22	In	146.82	Out
Southwest Dallas County	– 147.66	In	147.06	Out
Garland Primary	– 147.84	In	147.24	Out
Garland Back-Up	– 146.775	In	146.175	Out
Garland Simplex Back-Up	– 147.54			
County Backup-Up	– 146.37	In	146.97	Out
Irving Primary	– 146.13	In	146.73	Out
Dallas Amateur Radio Club Simplex	– 146.58			
Richardson Simplex	– 146.49			

***TARRANT COUNTY (Uses Allstate Coordinates)**

Primary	– 146.34	In	146.94	Out
Back-Up	– 146.25	In	146.85	Out
Arlington	– 147.75	In	147.15	Out
Arlington	– 147.015	In	147.615	Out

Mineral Wells	– 146.04	In	146.64	Out
*Weatherford	– 144.63	In	144.03	Out (Fort Worth 34/94 Primary)
Bridgeport	– 147.375	In	147.975	Out
*Cleburne	– 144.89	In	145.49	Out
*Waxahachie	– 144.81	In	145.41	Out
Hillsboro	– 146.19	In	146.79	Out
Waco	– 146.37	In	146.97	Out
*Corsicana	– 144.69	In	145.29	Out
*Sherman	– 147.60	In	147.00	Out
*Denton	– 146.31	In	146.91	Out
*Plano	– 146.78	In	146.18	Out
*Greenville	– 146.19	In	146.79	Out
Grahm	– 147.84	In	147.24	Out
Gilmer	– 147.60	In	147.00	Out

Dallas County Training Net – Sunday, 8:00 p.m., 28/88
Southwest Dallas Net – Sunday, 9:00 p.m., 66/06
Garland Training Net – Thursday, 9:00 p.m., 84/24

Calendar continued

□Dangerfield	– 146.28	In	146.88	Out (Tyler)
*Athens	– 146.28	In	146.73	Out
Paris	– 146.16	In	146.76	Out
Texarkana	– 147.60	In	147.00	Out
Shreveport	– 146.16	In	146.76	Out
National Simplex	– 146.52			

*Repeater that can be heard in Dallas under normal conditions

□Dangerfield can be heard at times – usually after dark, peaking before sunrise

STORM SPOTTER'S GLOSSARY AND GUIDE

Accessory Clouds – Clouds that are dependent on a larger cloud system for development and continuance. In a thunderstorm, accessory clouds include roll and shelf clouds, mammatus clouds and wall clouds.

Anvil – The advance spreading of the upper portion of a cumulonimbus cloud into an anvil-shaped cloud of fibrous or smooth appearance. Strong thunderstorms usually have large anvils which extend a considerable distance in advance of the storm.

Cumulonimbus Cloud – The parent cloud of a thunderstorm. The cumulonimbus cloud towers above ordinary cumulus clouds and is often accompanied by a flat cirrus anvil which extends far out in advance of the cumulonimbus cloud.

Cumulus Cloud – A column of rising air that has condensed into a dense, non-fibrous cloud appearing much like a rising mound, a dome, or cauliflower. The base of the cloud is relatively flat and dark while the tower is usually white and sunlit. The cumulus cloud is the first stage of a developing thunderstorm, although not all cumulus form into thunderstorms.

Downdraft – Cool air that falls with the precipitation in a shower or thunderstorm. (See thunderstorm)

Flanking Line – Often observed with severe or tornadic thunderstorms, the flanking line consists of a row of towering cumuli that merges with the storm's large cumulominbus cloud (large CB) from the southwest. The tops of individual cumulus clouds increase in height from southwest to northeast along the flanking line. Tornadoes are a possibility underneath the flanking line, sometimes as far as 10 miles southwest of the thunderstorm's precipitation area.

Funnel Cloud – The same as a tornado, except the rotating column of air remains aloft and does not touch ground. The cloud is not a funnel aloft but a tornado if a ground-based dust whorl is visible below the funnel-shaped cloud.

Gust Front – The leading edge of the cool thunderstorm downdraft air. The gust front is most prominent on the front side of an approaching thunderstorm and is usually marked by gusty, cool winds, blowing dust, and roll or shelf-type clouds. The gust front usually precedes the thunderstorm precipitation by several minutes. Tornadoes seldom occur in the cool downdraft air behind the gust front.

Hook Echo – A radar pattern sometimes observed in the southwest quadrant of a tornadic thunderstom. Appearing like the number six or a fishhook turned toward the east, the hook echo is precipitation aloft in the cloud being slung around the priphery of the intense rotating updraft. The hook echo is usually under 10 miles in diameter and is a favorable area for tornado development.

Mamma Clouds – Also called mammatus, these clouds appear as handing, rounded protuberances or pouches on the under surface of a cloud. With thunderstorms, mamma are seen on the underside of the anvil. These clouds do not produce tornadoes, funnels, hail, or any other type of severe weather.

Precipitation Shaft – A visible column of rain and/or hail falling from a cloud base. Heavy precipitation appears as a very dark column, sometimes with a turquoise tinge.

Rain-Free Base – A horizontally flat and dark cumulonimbus base that has no precipitation shaft beneath it. This structure usually marks the location of the thunderstorm updraft. Tornadoes most commonly develop (1) from wall clouds that are attached to the rain-free base, or (2) from the rain free base itself. This is particularly true when the rain-free base is observed to the southwest of the precipitation shaft.

Roll Cloud – An accessory cloud that forms along the thunderstorm gust front. The roll cloud is not attached to the thunderstorm base. It is often observed on the leading edge of the storm in advance of the precipitation shaft. Often extending from horizon to horizon, the roll cloud will appear to be "rolling" about its horizontal axis. Roll clouds do not produce tornadoes.

Scud Clouds – Low hanging, dark clouds often seen close to thunderstorms. These clouds are ragged and windtorn and are not attached to the thunderstorm base. Scud clouds do not produce severe weather. In many cases, scud clouds can be mistaken for wall clouds.

Severe Thunderstorm – A thunderstorm that goes from the mature stage to the severe stage before dissipating. Severe thunderstorms are more efficient "machines" because the updraft has been separated from the downdraft by updraft tilt and occasionally updraft rotation. Because of its greater efficiency and powerful updraft, the severe storm may last for hours beyond the lifetime of a normal thunderstorm while producing large hail, high winds, torrential rain, and possible tornadoes. Officially, a thunderstorm is classified as severe if 50 knot (58 mph) winds are measured, ¾ inch or larger hail is reported, or funnel clouds or tornadoes develop.

Straight Winds – Cool outflow from the thunderstorm's precipitation area. These winds originate as downdraft air which has reached the ground and changed from vertical to horizontal flow. Damaging straight winds are much more common than tornadoes are.

Shelf Cloud – An accessory cloud that forms along the thunderstorm gust front. The shelf cloud is usually attached to the thunderstorm base, unlike the roll cloud. The most well-developed shelf clouds are seen on the leading edge of an approaching thunderstorm. The top of the shelf is often smooth, while the base is ragged and windtorn. Gusty outflow winds usually accompany the shelf cloud as it passes overhead, followed within minutes by the precipitation. Tornadoes rarely occur in this leading portion of the storm.

Thunderstorm – A local storm produced by a cumulonimbus cloud, and always accompanied by lightning and thunder, usually with strong gusts of winds, heavy rain, and sometimes hail. Non-severe thunderstorms rarely last over two hours. A typical non-severe thunderstorm life cycle consists of three stages: (1) **Cumulus Stage** – warm, moist air rises (updraft) and condenses into tiny water droplets which make up the visible cloud. (2) **Mature Stage** – the cloud grows above the freezing level; some droplets freeze into ice while other droplets remain liquid. The ice particles grow at the expense of the water, becoming heavy enough to fall back to earth because of gravity. This precipitation generates lightning and thunder and cool air which falls back to earth with the precipitation. (3) **Dissipation Stage** – Cool rain and downdraft air dominate the entire cloud, choking off the updraft which is the lifeblood for the storm. The visible cumulonimbus cloud becomes "fuzzy" (glaciated) and the storm rains itself out.

Tornado – A violently rotating column of air, extending from a thunderstorm to the ground. The tornado occurs under the thunderstorm updraft, usually in the southwest quadrant of the storm. Research observations indicate that tornadoes and funnel clouds are usually pendant from (1) wall clouds or (2) directly from the thunderstorm base, within several miles to the southwest of an unusually dark precipitation shaft. The spinning motion of a tornado is most often left to right on the front side and right to left on the backside. Tornadoes have been called twisters and cyclones, but these words are all synonyms for the most violent storm on earth with estimated wind speeds of 100 to 300 mph.

Updraft – Warm moist air which rises and condenses into a visible cumulus or cumulonimbus cloud. Once the cloud forms, it depends on the updraft for continuance and further development.

Wall Cloud – A lowering of a rain-free cumulonimbus base into a ragged, low-hanging accessory cloud, usually from 1 to 3 miles in diameter. The wall cloud is situated below an intense updraft, one associated with a very strong or severe thunderstorm. When seen from within several miles, many wall clouds exhibit boiling "up" motion and rotation in the same sense as a tornado, except with considerably slower speed. A rotating wall cloud frequently precedes tornado or funnel cloud development from a few minutes up to possibly an hour. Spotters should key on any lowering of the cumulonimbus base as a suspect wall cloud, particularly when it is located southwest of the precipitation shaft. Note: Many low-hanging accessory clouds are mistakenly identified as wall clouds.

Warning – (issued for tornado, severe thunderstorm, flash flood, river flood.) A warning is issued when one of these severe weather types has already developed and has been spotted or indicated by radar. Warnings are statement of imminent danger and are issued for relatively small areas near and downstream from the severe storm or flood.

Watch – (issued for tornado, severe thunderstorm, flash flood.) A watch identifies a relatively large area in which flash floods or severe storms might occur. Quite often watches are issued before any severe weather has developed. Severe thunderstorms and tornado watches are usually for an area 140 miles wide by 200 miles long. The watch is only an indication of where and when the severe weather probabilities are highest.

Reporting Criteria	Estimating Hail Size	VIP Level	Theoretical Rainfall Rate	Category
1. Tornado/Funnel Cloud	pea size . . . . . 1/4 inch	1	0.1 inch per hour	Light
2. Hail 1/4 inch or greater	marble . . . . . 1/2 inch	2	0.1-0.5 inch per hour	Moderate
3. Damaging winds 50 mph or more	dime . . . . . 3/4 inch	3	0.5-1.0 inch per hour	Heavy
4. Flash Flooding	quarter . . . . . 1 inch	4	1.0-2.0 inch per hour	Very Heavy
5. Rain 1 inch per hour or more	golfball . . . . . 1.75 inch	5	2.0-5.0 inch per hour	Intense
	baseball . . . . 2.75 inch	6	5.0 inch per hour	Extreme

ASSOCIATION OF NORTH AMERICAN RADIO CLUBS

NEWS HIGHLIGHTS

ANARC is a federation of the most responsible, well established radio listening clubs in North America. RCMA attained Full Member status in ANARC in 1977. For a list of the ANARC Member and Associate Member clubs send a self-addressed, stamped business size envelope with your request to the address below.

For an annual subscription to the ANARC Newsletter, send $5 to:
Joe Barr, 1500 Bunbury Drive, Whittier, CA 90601. ($8 overseas subscription.)

ANARC 1982 CONVENTION JULY 23,24,25 MONTREAL, CANADA

Meeting to be held in the vast studio complex of Maison de Radio Canada. Convention hotel is the Holliday Inn at the Place Du Puis.

Registration information and forms are available from ANARC Headquarters Send a Self Addressed Stamped Envelope (SASE) to

ANARC Headquarters -- ANARC 82
1500 Bunbury Drive
Whittier, CA 90601

June 19 Southern California DXer (SCADS) "All Wave" meeting, 10AM-4PM Village View School Auditorium, 5361 Sisson Drive, Huntington Beach, CA. Details send SASE to Don Schmidt, 3809 Rose Ave, Long Beach, CA 90807.

July 3 American Shortwave Listeners Club (ASWLC) meeting 11:00 AM at club HQ 16182 Ballard Lane, Huntington Beach, Ca 92649

AUGUST 13,14,15 International Radio Club of America will hold a convention at the Holiday Inn, Moline, Illinois. IRCA is primarily a group of medium wave DXers which publishes "DX Monitor". So far no local convention address is available. Sample newsletters for $.50 is available from IRCA, PO Box 26254, San Francisco, CA, 94126.

Aug 13-15 International Radio Club of America (IRCA) Annual convention for Medium Wave AM DXers at Holliday Inn, Moline, Illinois.

Sept 3-5 National Radio Club (NRC) Annual convention for Medium Wave AM Dxers For Information send SASE to NRC, PO Box 32125, Louisville, KY 40232

GOOD NEWS Radio West is back in operation. Grant Manning is resumming his duties as head of Radio West, 3417 Purer Road, Escondido, CA 92025. Grant has done a great deal for the DX hobby and hopefully will someday apply his tallents to scanners. This writer has three of his items and will definitely vouch for them. We are glad to see Grant Manning back.

BAD NEWS—NEWARK NEWS RADIO CLUB founded in 1927 is having some hard times. They are looking for some new blood or new ideas or someone to do some work. If you are interesed in helping out contact NRRC Eugene Venderembse, 31-50 30th st, Astoria, NY 11106. Send a SASE.

TROPICAL GUIDE NORTH AMERICAN SHORTWAVE ASSOCIATION has their "Tropical Band Guide" available (2.000 to 5.900 Mhz) for $3.00 in USA $4.00 Non USA NASWA, PO box 2284, Minneapolis, MN 55402

Aircraft

Maj. Ron Hammer, Editor

Send private, commercial, firefighting and law enforcement aircraft frequencies of interest in the 108-136 MHz range and frequencies in other bands above 30 MHz associated with airports and aircraft plus questions, articles and tips related to aircraft monitoring to:

Major Ron Hammer, 821 Elisa Way, Roseville, CA 95678.

I must apologize to the faithful readers of this column for missing last month's issue. Just about the time I had whipped myself into shape to write it I recieved an envelope full of confetti that had been edited from the May 1982 issue by the editorial staff. It violated certain guidelines concerning "free advertising"--guidelines that are certainly the right of the editorial officers to issue--but which were sent out after that column was written. I do put some effort into writing each column, hence it is discouraging to have it chopped up. I personally feel that the companies/products/services that I have listed in the past are of immediate and direct interest to the readers, even if not strictly aero-band-monitor oriented. Company names, addresses, item catalog numbers, prices and recommendations (for or against or neutral) seem to me to be in the best interest of the readers, particularly the new or less sophisticated reader. Apparently the heartburn comes from listing discount prices that one company offers over (actually, under) another. I get reams of two kinds of mail: a) those that ask, "Where can I get...?", and b) those that in effect say, "Look what I have to offer--how can I get a message to those interested?" Well, I'll try to do better. The staff has the right to make the rules. I reserve the right to disagree with them--to the point of suggesting that maybe they might get a new column editor.

So, with that out of the way, let's try it again: I do endeavor to run everyone's material with equal fairness and honesty. I assure you that I don't get anything "under the table" for listing some company or product. I do get free copies, often in advance of publication, of books, frequency lists, etc. So far no one has sent me a free CRF-330K (multi-band radio listing for $2,495). I do frequently repeat names as I am forever getting new stuff. To wit (alphabetically): AMERICAN ELECTRONICS, P. O. Box 3911, Center Line, MI 48015 offers the whole Bearcat line at discounts and with many factory rebates. DEVER COMMUNICATIONS, Route 2, Box 277, Hot Springs, AR 71901--all kinds of scanner equipment. Bearcats, Regencys, Panasonics and the new Sony's such as the aforementioned CRF-330K for the rich kiddies. (Remember, rich or poor, its nice to have money.) EDMUND SCIENTIFIC, 101 East Gloucester Pike, Barrington, NJ 08007--hundreds of fun scientific toys, although not much on radios. FAIR RADIO SALES CO., INC. P. O. Box 1105, Lima, OH 45802-- a familiar dealer in surplus electronic equipment just out with their new catalog WS-82. GILFER P. O. Box 239, Park Ridge, NJ 07656 "North America's Shortwave Mail Order Place" (by their own admission). GALAXY ELECTRONICS P. O. Box 1202, Akron, OH 44309--all kinds of neat radio receivers, scanners, etc. MONITOR CONTROL 990 El Camino Real, San Bruno, CA 94066--VHF/UHF receivers and a new little booklet, the "Beacon" (free, I guess, for a trial copy, then $10 for a subscription). RADIO WEST back in business at their old location 3417 Purer Road, Escondido, CA 92025--mostly shortwave equipment and accessories. RMA ELECTRONICS 96 Richardson Road, Chelmsford, MA 01863--all manner of new and used receiving equipment including Regency M400's and M100's realigned to different frequencies. GROVE, of course, has some new stuff out. I am trying out one of his new TUN-2 preselector/tuners (10 Khz-30 Mhz) on my R-1000. Another RCMA member did not find it useful and sold it to me for a price I could not pass up. It seems to work for me, but hasn't transformed my life. An RCMA member, Wayne Wilson from Phoenix, AZ called me the other night to say he did not like his new Grove "Scanverter" device. Does anyone else have any reports on it? Anyway, I am not recommending any of the above companies or their products to anyone. Try them at your own risk. If anyone has been ripped of, let me know and I'll publish that information, too.

Well, the above "paragraph" includes most of what got clipped out, except for the offending price quotes. It is certainly by no means an exhaustive listing as can be noted by the flocks of names and addresses I've listed over the past couple of years. In general I do like to see these little companies flourish, as the more there are the more toys I'll have to pick from at more competitive prices. Individually, however, I have no interest in any of them.

For the type of person who is interested in this column, I do recommend a couple of publications that I personally subscribe to: AIR FORCE MAGAZINE which one receives for joining the AIR FORCE ASSOCIATION 1750 Pennsylvania Avenue, N.W., Washington, DC 20006. Membership is not limited to anyone except those interested in furthering the interests of the Air Force and aviation in general. Most of the big names in aviation belong (including myself, of course) (Joke). Anyway, they put out annual issues such as "The Air Force Almanac" listing every organization, airplane and weapons system in use; "Soviet Aerospace Almanac" listing the same for the other side; "The Electronic Air Force", an annual update on electronic warfare/systems (which the world just got a glimpse of in action between the Argentines and British), and other aviation related articles. This is not a "hobbyists" publication, but if you're into military aviation at all, this is where it's at. ($15 annual membership)

The other, broader interest magazine is SCIENCE DIGEST P. O. Box 10076, Des Moines, IA 50350. It has, of course, been around for a while. The latest issue is Volume 90 No. 6. It is similar to Scientific American, but a little less technical and a little more readable for the average bear.

On to two months worth of mail: One M. Elmitt Eastcott (CALA275) has corresponded with me on several items. His son commanded an Air Force flying squadron and he (Mr. Eastcott) has a close friend who is an executive for McDonnel-Douglas who has been involved in the development of the new KC-10 tanker version of the DC-10. Mr. Eastcott has some (no doubt) priceless tapes of the space shuttle Columbia's last landing at Edwards AFB. He suggested to me an article on the radio relay network's relay of Columbia communications. I have requested that he write the article as he writes a beautiful, articulate letter. Hopefully this will be forthcoming soon. I will take the liberty of printing his address for any of the readers who wish to correspond directly with a person who takes his aircraft monitoring seriously: 16421 Millstream Lane, Cerritos, CA 90701

John P. Breen (PA-066) of Pittsburgh writes: "Grove's 'Scanverter'...converts 225-400 down to 118-138 MHz. He had to 'overlap' so that each freq in 118-138 (20 MHz range) is common to 10 UHF freqs (200 MHz range), so you won't know which of 10 freqs your are hearing, e.g. '120 MHz' might be any one of 220, 240, 260, 280, 300, 320, 340, 360, 380, or 400. Perhaps some smart guessing will be needed, but contact info will not be reliable. Hey, we had to start somewhere and this unit won't be a heavy, power gulping, heat producing, unrepairable boat anchor!! Also, I just got my MFJ Satellite Converter (130-150 down to 30-50 MHz). Have been reading up on quad-yagi antennas with preamps. Bet that would shake up the antenna watchers in your neighborhood!" (How about a helix, John? That would really screw their minds up. Ha) Charles Epps (MO-017) suggest telling the neighbors the antenna is whatever they think it is.

A "knowledgable" reader from Florida sent in the PanAm "Panop" frequency charts and data that appear at the end of this column. As I've mentioned before, I do get traffic into/out of SFO on their 129.7 and I'm 100 miles away from SFO.

The freqs for Adams Field, Arkansas came from David Montgomery (AR-015)

Martin J. Mathis (IN-061) is a new reader who wants to know if there is anything to hear around Northwest Indiana. Martin, beings you don't have an aircraft-band capable receiver, I'd recommend getting a copy of "POLICE CALL" for your area and listen away.

Gerry Kerns (CAOR193) from Santa Ana sends the two pages of ATIS freqs from the Jeppesen 'Avigation' book. ATIS broadcast are usually continuous so are very

handy for checking your reception, tuning up, etc. Many ATC transmissions are very brief and infrequent during light traffic. Gerry wants to know if anyone has the Navy "Blue Angels" freqs.

I received a nice letter from Dick Stedman (MA-071) which I think I'll just print here as received as it concerns the issue just discussed above of listing sources for obtaining various items of common interest. The map company that Dick refers to is CHAMPION NATIONAL MAP CORP. 200 Fentress Blvd., Daytona Beach, FL 32014. Another good source of regional maps is THOMAS BROS MAPS 550 Jackson Street, San Francisco, CA 94133 or 17731 Cowan, Irvine, CA 92714 All of the Sacramento County appraisers and real estate agents use them.

Denny Biagioli (IL-026) who recently took over the Federal Government/Military column from Bob Grove wrote an inquiry concerning who should be writing what. I will answer him personally, but obviously there is no perfect way to divide up the material. A Strategic Air Command "FOXTROT" broadcast (coded information for SAC aircraft) is military, it is aircraft communication, and it is "below 30 MHz" and probably a few other things, too. I tend to babble about military things because my career was consisted of 6,000+ hours of military flying and 1 hour and 50 minutes of civilian time. (The guy I got the 1+50 time with called about a month ago. He was a pilot training classmate who took me out to rent a Piper Tri-Pacer back in 1958. He got his money's worth seeing me roll out on a 12 mile final approach like we did with a KC-97! He hasn't forgotten that in a quarter century.) Anyway, I do not want any more responsibility. In fact, I'd very much like to give up the column as a full-time editor and just contribute to it periodically. I'm going to contact Cliff Polkinghorn and Chuck Gysi about that. Nearly two years is a long time, whether it is rewarding or not. I get involved in too many other things like devoting time, effort and money for people I know who are running for state senator, county assessor, etc. and working against the unending California initiatives such as the current anti-gun misguided effort. Worrying about my job takes up some of my time, too. Us old 45 year old guys get tired after a while.

One Darrel E. Charest (TX-103) dropped me a line from Hurst, TX. Darrel was ATC Advisor to the 314th Air Division (PACAF) in Korea just before I was assigned to the 313th Air Division on Okinawa. He saw the picture in the February issue taken in the Kadena "CERAP" (rare combination Center and Radar Approach Control). Darrel served in the FAA Evaluations Branch in their Southwest Region and as the ATC Representative to Cannon and Holloman AFB's, NM. Actually, Darrel, I didn't know enough about air traffic control to be able to separate two flys with the proverbial screen door, if you remember that saying. Funny story: The acting ATC advisor to the 313th was temporarily a Lt. Col friend of mine. When they gave him the job they said, "If you ever really have a problem, call this phone number." Gene didn't know squat about ATC being just an old B-66 pilot. One day someone asked him something and he dialed the secret number. His second phone rang--he had gotten himself with the "emergency" number. Gene was happily soon replaced my a real FAA guy, Mike Leahy. (Mike had a few problems, too, like inadvertantly falling into the frozen frog pond just outside the Yokota Officers club stag-bar door!) Those were good days, Darrel. A real experience. I only flew the VT-29's for the venerable 18th Tactical Fighter Wing's Support Flight Operations, but its fun to think that I flew something for the famous 5th Air Force. Our headquarters for ATC matters was the Far East Comm Region at Fuchu Air Station, Japan, as I recall. Working for them and for PACAF (Pacific Air Forces) was like being a mushroom. You were always kept in the dark and every once in a while someone would open the door and throw some manure in on you! Well, as noone else sent in any presentable freq list, that's it for this time.

AUTOMATIC TERMINAL INFORMATION SERVICE (ATIS)

The listing below includes airports served by an ATIS within the 48 United States, plus that portion of Canada within the U.S. (High Altitude) Enroute Charts coverage. Airports are listed alphabetically by U.S. State/Canadian Province name. Within each U.S. State/Canadian Province they are listed under the same name shown on the Jeppesen Instrument Approach Charts, with civil airports by city name, followed by airport name when different, or with military airport/facility name. An asterisk (*) indicates part time service.

ATIS information is also provided on Jeppesen Instrument Approach Charts, in Jeppesen U.S. (Low Altitude) Enroute Charts communications tabulations, and in the Jeppesen U.S. Airport Directory.

UNITED STATES

Alabama
- Birmingham 119.4
- Ft. Rucker (Cairns AAF) 111.2
- Huntsville (-Madison Co-Jones) 121.25
- Mobile (Bates) 124.75
- Montgomery (Dannelly) *121.3

Arizona
- Ft. Huachuca
  - (Libby AAF/Sierra Vista) *111. 6
- Phoenix
  - (Sky Harbor Int'l) Arr 121.2, *Dep 124.3
  - (Phoenix-Deer Valley) *126.5
- Scottsdale *118.6
- Tucson (Int'l) 123.8

Arkansas
- Ft. Smith *120.4
- Little Rock (Adams) *125.6

California
- Bakersfield (Meadows) *118.6
- Burbank (Burbank-Glendale-Pasadena) 134.5
- Carlsbad (Palomar) *120.15
- Concord (Buchanan) *124.7
- Edwards AFB *116.4
- El Monte *118.75
- El Toro MCAS *117.2
- Fresno 110.3 119.3
- Fullerton *125.05
- Hawthorne *118.4
- Hayward *126.7
- La Verne (Brackett) *124.4
- Long Beach *127.75
- Los Angeles
  - (Int'l) Arr 133.8, Dep 135.65
- Monterey (Peninsula) 119.25
- Napa *124.05
- Oakland (Metro Oakland Int'l)
  - Rwys 9-27/15-33 126.0, Rwys 11-29 128.5
- Ontario (Int'l) 126.5
- Oxnard *118.05
- Palm Springs *118.25
- Palo Alto (-of Santa Clara Co) *120.6
- Point Mugu NAS *125.55
- Sacramento
  - (-Executive) 125.5
  - (-Metro) *126.75
- San Carlos *125.9
- San Diego
  - (Brown) *132.35
  - (Gillespie) *125.45
  - (Int'l-Lindbergh) 134.8
  - (Montgomery) *126.6
- San Francisco (Int'l) 113.7 115.8
  - (108.9 when SFO VOR OTS)
- San Jose
  - (Mun) *114.1
  - (Reid Hillview) 125.2
- Santa Ana
  - (John Wayne-Orange) 126.0
- Santa Barbara 125.1
- Santa Monica *119.15
- Santa Rosa (Sonoma) *120.55
- Stockton (-Metro) 118.25
- Torrance *125.6
- Travis AFB 116.4
- Van Nuys 113.1 118.45

Colorado
- Aspen-Pitkin *120.4
- Colorado Springs (City of-) 125.0
- Denver
  - (Stapleton Int'l) Arr 125.6, Dep 124.45
  - (Arapahoe) 120.3
  - (Jeffco) *126.25
- Ft. Carson (Butts AAF) *108.6
- Pueblo (Pueblo Mem'l) *125.25

Connecticut
- Hartford (-Brainard) 126.45
- Windsor Locks (Bradley Int'l) 118.15

Delaware
- Wilmington (Greater-) 123.95

Florida
- Daytona Beach (Reg'l) 120.05
- Ft. Lauderdale (-Hollywood Int'l) 111.4
- Ft. Myers (Page) 124.65
- Hollywood (North Perry) 121.3
- Jacksonville (Int'l) 125.85
- Miami
  - (Int'l) Arr 117.1, Dep 119.15
  - (Opa Locka) *125.9
  - (Tamiami) 124.0
- Orlando
  - (Herndon) *127.25
  - (Int'l) 121.25
- Pensacola (Reg'l) 121.25
- Sarasota (-Bradenton) *121.3
- Tallahassee 119.45
- Tampa (Int'l) 126.45
- Vero Beach 117.3
- West Palm Beach
  - (Palm Beach Int'l) 123.75

AUTOMATIC TERMINAL INFORMATION SERVICE (ATIS)

Georgia
- Atlanta
  - (Fulton-Brown) *119.0
  - (Dekalb-Peachtree) *128.4
  - (The Hartsfield Atlanta Int'l) Arr 119.65, Dep 125.55
- Columbus (-Metro) 127.75
- Ft. Benning (Lawson AAF) *111.4
- Ft. Stewart (Wright AAF) *110.8
- Savannah
  - (Apt) 121.3
  - (Hunter AAF) 111.6

Idaho
- Boise (-Air Terminal) *123.9

Illinois
- Champaign (Univ. of Illinois-Willard) Arr 124.85
- Chicago
  - (-Midway) 120.05
  - (-O'Hare Int'l) 135.15
  - (Du Page) 124.8
  - (Pal-Waukee) *124.2
- Moline (Quad-City) 121.2
- Peoria (Greater-) 126.1
- Rockford (Greater-) *126.7
- Scott AFB 118.65
- Springfield (Capital) 127.65

Indiana
- Evansville (Dress Reg'l) 120.2
- Ft. Wayne 121.25
- Grissom AFB *116.5
- Indianapolis (Int'l) 125.35
- South Bend (Michiana Reg'l) 118.15

Iowa
- Cedar Rapids 124.15
- Des Moines 119.55
- Sioux City 119.45
- Waterloo 120.65

Kansas
- Ft. Riley (Marshall AAF) *109.4
- Hutchinson 124.25
- Kansas City (Fairfax) 123.7
- McConnell AFB *119.5
- Wichita (Mid-Continent) 125.15

Kentucky
- Ft. Campbell (Campbell AAF) 293
- Ft. Knox (Godman AAF) *109.6
- Lexington (Blue Grass) 126.3
- Louisville
  - (Bowman) 112.2
  - (Standiford) 118.15

Louisiana
- Baton Rouge (-Metro-Ryan) 125.2
- Lafayette (Reg'l) *120.5
- Monroe (Reg'l) *125.05
- New Orleans
  - (Int'l) 126.7
  - (-Lakefront) 124.9
- Shreveport (Reg'l) *128.45

Maine
- Bangor (Int'l) 125.6
- Portland (Int'l) 119.05

Maryland
- Andrews AFB 113.1
- Baltimore (-Washington Int'l) 115.1 127.8

Massachusetts
- Bedford (Hanscom) *124.6
- Boston (Logan Int'l)
  - Arr 112.7, Dep 125.55
- Hyannis (Barnstable) *123.8
- Nantucket *126.6
- Norwood *125.1

Michigan
- Detroit
  - (-City) 120.75
  - (-Metro Wayne Co) 124.55
  - (Willow Run) 110.0
- Flint (Bishop) 116.9
- Grand Rapids (Kent Int'l) 118.85
- Kalamazoo 127.25
- Lansing (Capital City) 119.75
- Muskegon 124.3
- Pontiac (Oakland-) *125.45
- Saginaw (Tri-City) 118.6

Minnesota
- Duluth (Int'l) 124.1
- Minneapolis
  - (Crystal) 125.7
  - (Flying Cloud) *124.9
  - (Minneapolis-St. Paul Int'l) 135.35, TCA Arr info 120.8
- Rochester 120.5
- St. Paul (-Downtown Holman) *118.35

Mississippi
- Columbus AFB *115.2
- Gulfport (-Biloxi Reg'l) 119.45
- Jackson (Thompson) 119.05

Missouri
- Kansas City
  - (Int'l) 128.35
  - (-Downtown) 124.6
- St. Louis
  - (Lambert-St. Louis Int'l) 120.45
  - (Spirit of-) 134.8
- Springfield (Reg'l) *119.05

Montana
- Billings (-Logan Int'l) 126.3
- Great Falls (Int'l) 126.6

Nebraska
- Lincoln 118.05
- Omaha (Eppley) 120.4

Nevada
- Las Vegas (McCarran Int'l)
  - Arr 116.9, Dep 125.6
- Reno (Cannon Int'l) 125.8

Airlines Buy WU/AirFone's Air-Ground Tel

Western Union has acquired a 50-percent ownership interest in AirFone, which has developed a new air-to-ground telephone system and has 12 airlines signed up as initial customers.

When service begins in the second half of the year, in-flight passengers will be able to place phone calls to locations in the continental US. Passengers will not, however, be able to receive calls. The service will also be available on aircraft at 16 US airports while passengers wait for take-off.

Robert Flanagan, chairman of Western Union, sees the service filling "one of the few remaining gaps in this country's telephone communications."

AirFone President John Goeken says the proposed charge is a flat rate of $7.50 for the first three minutes . . . automatically billed to a credit card. Each additional minute is $1.25. Goeken has founded a number of companies, including MCI, Goeken Systems (a large terminal network sold to FTD in 1980) and SAFE, a microwave frequency planning company.

He says the AirFone system is designed to take 1,700 calls per hour in heavily traveled areas, and 400 to 900 in light to medium traffic areas.

In operation, the AirFone system carries voice messages from the plane via radio to a ground station, which then transfers the radio waves onto regular telephone lines.

The radiotelephone equipment will use amplitude compandored sideband (ACSB) technology, with 899.00 to 901.00 MHz used for the down channel and 944.00 to 946.00 MHz for the up channel. E.F. Johnson is supplying the phone bodies and Webcor the handsets.

This summer, final testing will be done on about 24 aircraft, with full-scale service on long-haul flights planned for September.

American Airlines and Republic Airlines, the first carriers to sign up, have been joined by Pan American, United, Trans World, Continental, Altair, Northwest Orient, Air One, Delta, Braniff and Eastern.

ADAMS FIELD MUNICIPAL AIRPORT, ARKANSAS

118.7 Adams Field
118.95 Contact prior to Taxi?
119.5 West Approach Control
121.5 Emergency
121.9 Taxi Ground
122.8 Unicom
122.9 "
123.0 "
123.1 FLIGHT SCHOOL
123.3 Unicom
124.2 EAST Approach Control
125.6 Plane to Plane Info
125.8 Plane to Plane
130.2 Phone Patch to Plane ?
133.3 Air Controlers

Keep up the good work.

Sincerely yours,
David Montgomery Ar-015
7516 Ember Lane
Little Rock, Ar 72209

MARCH 22, 1982

DEAR RON,

FIRST OF ALL, YOUR AIRCRAFT COLUMN IN THE RCMA NEWSLETTER IS AMONG THE MOST ENJOYABLE TO READ EACH MONTH. DESPIGHT LETTERS YOU'VE INCLUDED TO THE CONTRARY, I SUSPECT MOST MEMBERS WOULD AGREE WITH ME AND APPRECIATE THE TIME YOU PUT IN TO YOUR WRITING OF THE COLUMN. IT IS ALWAYS INTERESTING READING, EVEN THOUGH I PERSONALLY AM NOT A MONITOR OF THE AIRCRAFT BANDS! YOUR COLUMN IS FREQUENTLY THE MOST INFORMATIVE SOURCE ABOUT

SUPPLIERS OF VARIOUS KINDS OF EQUIPMENT AND RADIO-RELATED ITEMS.

FOR THIS REASON, I THOUGHT YOU MIGHT BE INTERESTED IN THE ENCLOSED FLYER FROM THE CHAMPION NATIONAL MAP. CO., IN FLORIDA. I JUST BOUGHT ONE OF THEIR MAPS FOR USE IN MY OFFICE, AND THE QUALITY IS EXCELLENT. I ALSO RECEIVED MY MAP ONE WEEK FROM THE DAY I MAILED IN MY ORDER, SO THEIR SERVICE ISN'T TOO BAD, EITHER! THE MAPS ARE EXPENSIVE, BUT, IN MY OPINION, WORTH IT. THEIR HUGE SIZE MAKES THEM SOMEWHAT UNIQUE, AND WITH THE BILL THERE WAS A COUPON ALLOWING ME TO BUY EITHER A USA OR WORLD MAP FOR $20-! I SUSPECT OTHER MEMBERS MAY BE LOOKING FOR GOOD MAPS OF THEIR STATES OR LOCAL AREAS, AND YOU MAY WISH TO PASS ON THIS INFO.

REGARDS,

Dick Stedman (MASS-071)
Springfield, Mass.

KNOCK OUT IMAGE INTERFERENCE

Now you can tune out strong interfering signals such as mobile phone, aircraft, FM, amature radio or weather band broadcasts and avoid front end overload in your scanner.

The Capri Electronics RF Notch Filter can be used with any scanner that has a Motorola type external antenna jack. No modifications to your scanner are necessary. Works with outside antenna systems as well as with the built-in whip that comes with your scanner.

The easy tune, calibrated dial lets you move the notch to any interfering signal from 70 MHz to 200 MHz. The compact unit measures only 2" x 2" x 1¼". The notch depth is 40 dB at 162 MHz and the VHF insertion loss is less than 1 dB (0.5 dB typical).

Your complete satisfaction is guaranteed. Order your RF Notch Filter today for only $19.50 plus $2 shipping and handling.

Mail and telephone orders welcome. Send check or money order or we can ship COD. Visa and Mastercard also accepted. Please include your card number and expiration date. FREE catalog of scanner accessories sent on request.

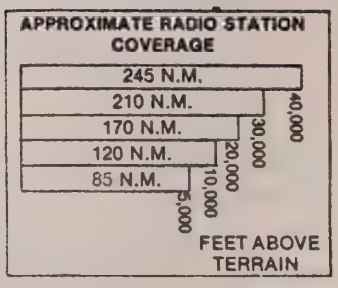
PAID ADVERTISEMENT

CAPRI ELECTRONICS
Route 1-N
Canon, GA 30520
(404) 376-3712

MasterCard VISA

FLIGHT CONTROL VHF NETWORK SUMMARY

Flight Control USA Office	Call-Sign	Freq.	Site	SELCAL	CALSEL
MIAOW	Miami Flight Control	130.25	MIA &	X	
		130.6	various	X	
		131.25	remote	X	
NYCOW	New York Flight Control	129.65	JFK	X	X
			BGR	X	X
			BOS	X	X
		129.7	IAD	X	X
			PHL	X	X
		131.05	DTW	X	X
			ORD	X	X
SFOOW	San Francisco Flight Control	129.7	SFO		
			LAX		
	Panop Seattle	129.3	SEA		



PANOP FREQUENCIES AT REGULAR AIRPORTS

ABJ	131.4	EZE	131.4	LGA	—	PHL	129.7
ACC	131.4	FCO	131.4	LGW	131.4	PHX	(Western Airlines) 130.1
AKL	131.4	FLL	130.0	LHR	131.4/131.85		
ATL	(Lockheed) 122.95	FMY	130.0	LOS	131.4	PTY	131.4
		FRA	131.4	MAR	131.4	ROB	131.4
AUH	(Speedbird) 131.9		IGS 131.85	MCO	130.0	SAN	131.25
		GIG	131.4	MEL	130.0	SCL	(Braniff Op.) 130.4
BAH	(Bahrain Air Ser.) 131.9	GUA	131.4	MEX	131.4		
		GUM	131.9	MIA	129.7/129.8	SEA	129.3
BKK	131.4	HAM	131.4	MNL	131.4	SFO	129.7
BOM	131.4		IGS 131.85	MSY	130.0	SHA	—
BRU	131.4	HKG	131.4	MUC	131.85	SIN	131.5
CCS	131.4	HNL	128.9	MVD	131.4	SJO	131.4
DCA	128.85	IAD	129.7	NBO	131.5	SJU	131.4
DEL	131.4	IAH	129.7	NRT	130.9	SRQ	130.0
DFW	(Braniff) 130.55	JAX	130.0	NUE	131.85	STR	131.85
		JFK	130.25/129.8	ORD	131.05	SYD	131.4
DHA	(Saudia) 131.5	JNB	131.4	ORF	130.0	TPA	129.7
		KHI	131.4	ORY	(Aeroport de Paris) 131.9	TXL	131.85/131.4
DKR	131.4	LAS	129.5			VCP	131.4
DTW	131.05	LAX	129.7	OSA	131.65	ZRH	(Swissair) 131.7/129.7
DXB	(Dubai Traffic) 131.6			PBI	130.0		
				PEK	—		

NOTES

- At stations where Panop frequencies are not available, the name of the handling agent is shown in parenthesis, with the agent's VHF frequency.
- A second frequency, if listed, should be used to receive weight and balance finals.

Comms/Met 5/104

Flt Control Comms & VHF Network — Jan 29 - 82

DOMESTIC FLIGHTS

Domestic flight watch communications requirements are met by using (in order of preference):

1) The company-operated MIAOW VHF network,

2) The company-operated NYCOW or SFOOW VHF networks, or

3) ARINC.

MIAOW VHF Network (Shown in Green). All domestic flights dispatched by MIAOW should use the MIAOW network when in range, guarding the appropriate frequency. The base station for this network is located adjacent to MIAOW. Remoted stations give full VHF coverage for the area indicated. The call sign is "Miami Flight Control." Give location or frequency on initial call. SELCAL is available on all Miami Flight Control frequencies.

NYCOW (Shown in Red) and SFOOW (Shown in Blue) Networks. Domestic flights not operating within range of the MIAOW network should utilize the NYCOW or SFOOW network if within range. See International Flights below.

ARINC (Shown in Black). Flights not in range of any company network will guard the ARINC frequency for the sector through which the flight is operating. The radio call sign for any ARINC station is "ARINC". SELCAL and phone patch services are available on all frequencies. CALSEL is not available.

INTERNATIONAL FLIGHTS

When a portion of an international flight operates within range of the company-operated NYCOW or SFOOW VHF networks, they should be utilized to meet flight watch communication requirements. Atlantic flights not in range of the NYCOW network should use the MIAOW network if in range. Flights not in range of any company-operated VHF network should use ARINC when in range.

NYCOW VHF Network (Shown in Red). NYCOW operates the "New York Flight Control" facility on 129.65 with remoted stations at BOS and BGR. This frequency is monitored at all times. NYCOW also operates 129.7 with remoted stations at IAD and PHL and 131.05 with remoted stations at DTW and ORD. 129.7 and 131.05 are monitored only with CALSEL. Calls to New York Flight Control on 129.7 or 131.05 must be preceeded with a four-second CALSEL tone.

SFOOW VHF Network (Shown in Blue). SFOOW operates the "San Francisco Flight Control" facility on 129.7. The

Aircraft continued

Panop facility at LAX on 129.7 can also be used for direct communication to SFOOW by using the call sign "San Francisco Flight Control". Panop Seattle, 129.3, can provide direct communication with SFOOW.

FLIGHT CONTROL MESSAGES TO FLIGHTS, U.S.

To direct a message to a flight in the continental U.S. that is not within range of any company-operated VHF network, the flight controller should contact the ARINC control point for the area through which the flight is operating. (See chart.)

For a flight within the New York Flight Control coverage described above, precede a voice call on VHF with SELCAL.

The USA Flight Control Communication & VHF Network is shown on facing pages 16 & 17.

Business, Etc.

This column is for reporting frequency and radio system information for the following varied services: business, forest products, petroleum industry, special industrial, manufactureers, news media (behind-the-scenes radio, TV & newspaper), motion picture industry, security (private patrol, detective agencies, campus security & police, amusement park & stadium security, shopping center & mall security, plant/business/hotel security, etc.), General Mobile Radio Service (GMRS), mobile phone/RCC & paging, trucking firms, bus lines, taxi cabs, tow trucks, utility companies (private & municipal water, power, electric, gas, telephone, etc.), and all school & college related frequencies. Send information and questions pertaining to the radio services covered in this column to:

Larry Smith, 1223 Vinsetta Blvd., Royal Oak, MI 48067.

WHICH RANKS HIGHEST IN PROFIT MAKERS IN THE U.S.? THE AUTO & TRUCK INDUSTRY OR SUPERMARKETS? [ACCORDING TO FORBES MAGAZINE]

-- THE DETROIT NEWS MARCH 14, 1982 --

SUPERMARKETS, WHICH FORBES MAGAZINE RANK 27th AMONG 46 MAJOR INDUSTRIES IN PROFITABILITY [BY CONTRAST, THE AUTO & TRUCK INDUSTRY RANKS 38th] ORDINARILY EARN A PENNY ON EVERY DOLLAR SPENT. "NONE OF US ARE MAKING THAT ANYMORE" SAYS DAVID ROGERS, BLOOMFIELD HILLS [MICH.] CONSULTANT.

SUPERMARKETS WHERE THIS IS MOST COMMON [IN MICH.] ARE:

THE PICTURE FOR THE 5 LOCAL CHAINS IN MICHIGAN ARE:

BORMAN'S INC.[FARMER JACK]: LOSING BETWEEN 2-3 MILLION DOLLARS PER QUARTER. EVEN DURING 1980, WHEN ITS SALES EXCEEDED $1 MILLION, BORMAN'S, WITH THE LARGEST SHARE OF THE DETROIT MARKET EARNED ONLY $33.000. ---- 463.85 KKO-688 SOUTHFIELD ----

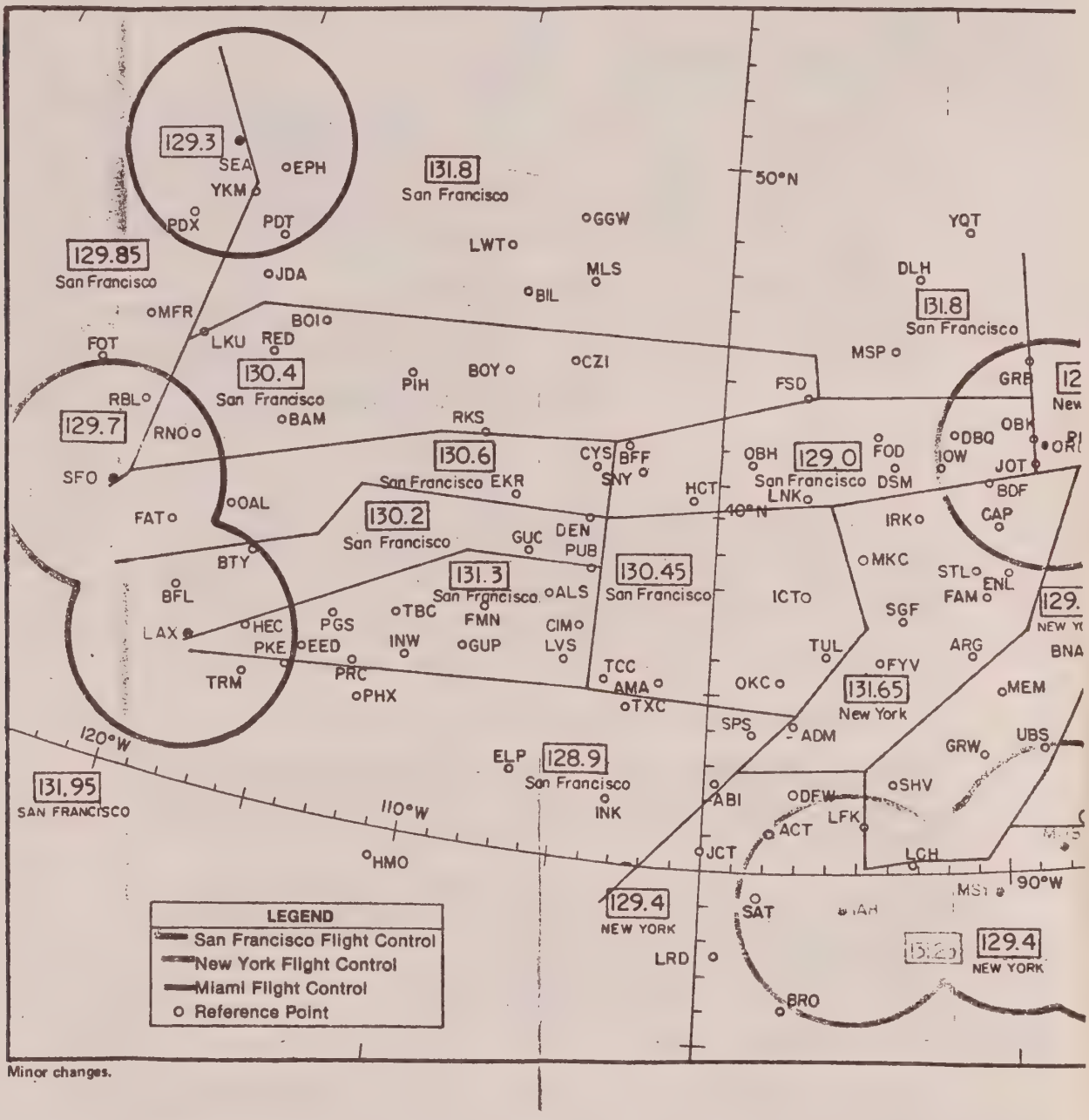
KROGER, INC.: THOUGH IT HAS CLOSED DOZENS OF MICHIGAN STORES, KROGER "IS GOING GANGBUSTERS IN OTHER STATES," SAYS JOHN ALLEN, MICHIGAN STATE UNIVERSITY RESEARCHER OF FOOD DELIVERY SYSTEMS. KROGER IS THE SECOND LEADING PROFIT-MAKER IN THE SUPERMARKET INDUSTRY, WITH NET INCOME OF $94 MILLION IN 1980, A 14% RETURN ON EQUITY AND A PROFIT MARGIN FOR THE ENTIRE CORP. ---- 154.54 KQJ-742 LIVONIA ,----

ALLIED SUPERMARKETS [GREAT SCOTT]: SHOWING A PROFIT THE LAST TWO YEARS AFTER REORGANIZATION AND A NEW UNION CONTRACT. ---- 154.57 KM-5519 [DETROIT] & 151.775 KXP-722 DETROIT.----

NO LISTINGS ON MICROFICHE FOR THE A & P CHAINS AND CHATHAM SUPERMARKET CHAINS.

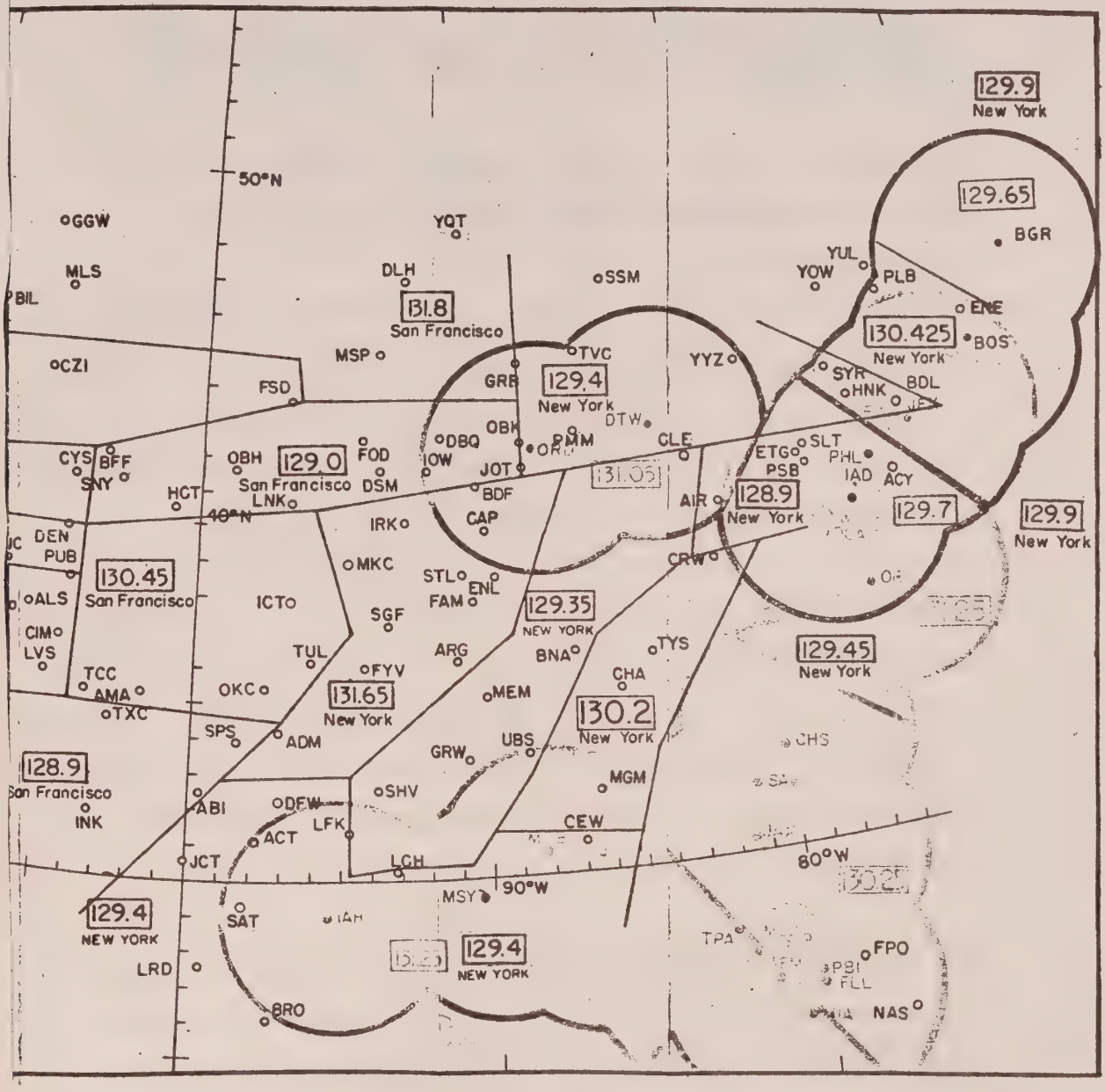
NOTE: IF YOU HAVE A STORY PERTAINING TO THIS THAT YOU FEEL WILL BE OF INTERST TO THE MEMBERSHIP, PLEASE DO SEND IT IN TO ME AND I'LL PUT IT IN, IN A FUTURE ARTICLE. THANKS.

-- LARRY [MI-001]



Minor changes.

USA Flight Control Communications & VHF Network



«SPECIAL FEATURE»

COMMENTS ABOUT A NEW SCANNER - A RENEWED MAGAZINE, FROM GORDON WEST, RCMA MEMBER, CA-OR- 017 , EDITOR-IN-CHIEF, CB RADIO TIMES.

Patience is paramount when a company, magazine, or organization is struggling to forge ahead.

A few years ago, RCMA was just a small struggling organization, trying to put together a monthly newsletter for a collection of scanner radio enthusiasts in Southern California. I saw the potential of RCMA as a national organization for scanner enthusiasts, and began promoting it in CB Magazine.

Through this promotion in a national publication with over 100,000 paid subscribers, it was easily seen that RCMA became a household word throughout the United States almost overnight. There is no dispute that the national publicity on almost a monthly basis gave RCMA its biggest increase in monthly membership.

CB radio as a hobby is now coming back. Actually, it never went away--just the manufacturers of CB equipment and the profitability of staying in the CB business went away. An over supply of CB radios and too much price cutting with too many manufacturers led to the gigantic crash in the CB industry. Radio enthusiasts continue to buy radios, but radios so low in price that manufacturers could not stay in business selling radios at below their cost.

It was this suicidal downward spiral of the CB economy that wiped out nearly every CB type magazine. Only two survived--CB Magazine and S-9.

Now there is only one--CB RADIO TIMES, which has now taken over S-9 Magazine.

It was a tough struggle, and we appreciate the patience of many RCMA members who subscribe to CB Magazine for hanging in there when issues were delayed many months. Any combined issue will result in your subscription being extended for each combined issue. In other words, most of you will have an additional year added to your present subscription.

If you subscribe to both publications, you will only be receiving the new combined issues of CB RADIO TIMES and your ultimate subscription will be extended for the term of the other publication. This means if you have a new two year subscription with both magazines, you will be receiving CB RADIO TIMES for four years. You don't have to do a thing--the computer should make it all automatic.

Or at least we hope so. If you have problems with your subscription, drop me a note, and I will try and handle it for you personally. Be sure and send us your subscription label and all of the details outlined in the goof-up. You will be sent any issues missed, and will probably be given some courtesy issues in extension of your normal subscription to make up for the trouble.

You see, now that there is only one hobby radio magazine that takes in everything from CB radios to scanners to

short wave sets, we are trying hard to keep everyone happy. Thanks again for all your patience.

Ultimately, the magazine name will turn into simply "RADIO TIMES."

NEW CONCEPTS IN SCANNERS

I invite all of your to consider the subject of new innovative scanner receivers. As scanner specialists, the receiver that you would like to see someone design is probably far too expensive for the normal scanner buff to plunk down $800. This is why we don't see a scanner with better audio, an S-meter, switchable crystal lattice filters for optimum selectivity, better AGC, and things like this. It's not that someone can't come up with a scanner like this, but how many people would buy it?

The scanner market remains unchanged from last year. Just as many people are buying scanners this year as they were last year. Five hundred thousand individual scanner sets will be marketed this year from approximately five different scanner manufacturers.

A relatively new manufacturer, Fox Marketing, Incorporated, is vying for your business. If nothing else, they would simply ask that you take a look at their new and innovative semi-portable set. Sure, some of the first units weren't quite up to spec, but that's all resolved now. Their BMP 10/60 is a very interesting set, and if you haven't written them for more details about it, you should. It has some interesting capabilities, and since it is unique, there is nothing else to compare it to.

A few years ago, I was proud to be the very first national marketing manager to introduce a fully programmable synthesized scanner. It was called the SBE Opti-scan. Unlike all the other sets that used crystals, this programmable scanner--first of any programmable scanner on the market--used optical light sensors that would [redacted] through a user programmed card. The idea was ingenious, the scanner well ahead of its time, and it sold relatively well. For most users it performed like a champ.

Like any scanner in a downtown area, it performed lousy when it came to intermod rejection and frequency selectivity. So do some of the newer sets today.

Soon followed by this set was the Tennellec. It was a disaster in electronics. Although it was first with a keyboard concept in digital frequency entry, there must have been nothing behind the keyboard other than two Dixie cups and a string. It bombed out royally.

Then Bearcat came out with their very popular BC-101, which still continues to enjoy popularity among scanner buffs. So does the Opti-scan.

I invite you to consider a whole new type of scanner from FOX [redacted]. Somewhat similar to the Opti-scan in design, it uses a format of preprogrammed information packs that are inserted into the scanner when you are scanning in a certain area or wish to scan[redacted] a certain service. The actual frequencies are "burned in" on a programmable chip. The chip simply plugs into the front of the unit by the customer.

Dealers will have the programmable equipment capable of entering the frequencies. For the novice scanning enthusiast, the idea may work well. For those wishing certain blocks of frequencies that are easily changed in seconds, it may work well for you. It means repeated sales and traffic for the dealer when the user comes back again for additional packs. That's good for business.

Fox·Pac™
Fox Marketing, Inc.

Consider that RCMA as a group might own its own programmer for these packs. That's certainly not out of the question, and it's something for you to think about. The actual programmer is not listed at too high of a cost, either, in case you wish to do for your own RCMA group.

I am not in cahoots with Fox Marketing. I only review products, and take a look at their possibilities.

Anyone can say to a manufacturer that they are producing the wrong scanner. However, it takes a real marketing and scanner buff to be able to come up with a unit and make it fly after it's been designed.

I invite everyone to review what the folks at Fox are doing. Their design is indeed unique, and I hope that all of you will professionally analyze it and see its benefits for certain users.

Every scanner company is always looking for more input from scanner specialists like yourself. If you feel strongly about a certain type of scanner you would like to see, why not get in touch with these scanner companies and give them some suggestions. If you think they won't listen, write them to me and I'll make darn sure that they get your suggestions.

Sure, we would all like to see a $200 scanner that does everything for us, the scanner specialists. Don't hold your breath less you die of asphyxia. Take a deep breath, and look and see what's new on the counters and see if it fits your scanning techniques.

Here's the latest from Fox:

FOX MARKETING INTRODUCES NEW DIMENSION IN SCANNERS

NEW YORK, NEW YORK -- April 22, 1982 -- Fox Marketing, Inc., Dayton, Ohio today unveiled a new concept in scanners. It's Fox-Pac receiver eliminates the restrictions of a crystal scanner and reduces the complications of a programmable scanner for the average consumer. The Fox-Pac uses plug-in interchangeable modules which permit unlimited custom programming.

The Fox-Pac modules are programmed by local dealers for the hot action frequencies of that market. Factory Fox-Pacs for all U.S. cities will be available from participating dealers. This concept provides versatility for the business or vacation traveler to plug into the action wherever he is.

With the Fox-Pac, the buyer can customize his scanner for exactly what he wants to hear. Police, fire and emergency frequencies may be put on one cartridge, marine and weather on another, mobile phone frequencies on a third plus other interests.

The Fox-Pac surpasses both the crystal and programmable scanner. It's flexibility and number of frequencies scanned exceeds any crystal scanner. In addition, this new product is easier to use than current programmable scanners while offering more personalized selections. All Fox-Pac modules are divided into "banks" of ten channels each. Modules are available in 20, 50 and 100 channel capabilities.

Still the smallest base, mobile or portable unit, the Fox-Pac weighs only 1-1/2 pounds, has two full watts of audio and optional accessories including a Mobile Mounting Bracket, Porta-Pac and external speaker.

Features are the skip, action and pause capabilities. Skip allows one to skip over channels, pause delays the scanning process two seconds after each broadcast and action constantly monitors favorite frequencies and interrupts all others.

Three models of the Fox-Pac will be available: 100 FXR provides 100 accessible channels, 50/100 FP has an additonal 50 channel programmable capability and the 50/100 AAP adds the ability to scan AM and aircraft bands.

Beginners Corner

Have a question? If you are a new scanner listener and don't understand something about monitoring that most everyone else seems to understand, send in your question. When possible, your question and the answer will be printed. No answers will be sent by return mail. Your name will not be printed. Write to:
David E. Crowley, 7234 Balson Ave., University City, MO 63130.

Q. How do I eliminate interference from my scanner?

A. This question is a composite from several I've had from readers on various interference problems, and I'll try to condense their experience to pass along to you.

Interference in a sensitive programmable scanning receiver can originate in almost any part of the electromagnic spectrum and can induce the scanner to produce all sorts of spurious internal signals in addition to the spurious signals, such as birdies, that it generates without outside help. For our purposes we need only distinguish two sources of outside interference, namely interfering signals from within the usual public safety band, such as the weather broadcasts at 162.55 MHz, and those originating in other bands such as broadcast FM and VHF-TV.

Interference from the broadcast FM and TV bands can usually be recognized from the cadence of the speech or music emanating from your scanner. The offending station is easily located using your FM radio and TV set. With this type of interference, the simplest approach is to insert some kind of filter or wave trap in the transmission line between your antenna and scanner. One reader who is troubled by several powerful FM broadcast stations in his area reports good results with the Grove Enterprises FTR-2 Scanner Filter ($29.95) which is tunable, so that he can attenuate the most offending FM signal, but he cannot tune out more than one FM station at a time. The FTR-2 and its successor the FTR-3 ($39.95) can only tune down to 76 MHz, so it can't help with interference from TV channels 2, 3 and 4 which range from 54 to 72 MHz and whose images annoyingly turn up in the public safety VHF-Low band from 30 to 50 MHz. Therefore this reader uses the Grove Filter for the FM broadcast signals and some home-built wave trap filters for the channel 2 video carrier whose image sits right on his local fire frequency. So much for inexpensive tuneable filters for the FM broadcast and TV bands.

It is also possible to obtain a broad-band non-tuneable filter for the FM broadcast band from Channel Master (Model 7204, $10.75) designed to remove FM interference from TV distribution systems. Attenuation ranges from 5 dB at 88 MHz to 28 dB at 108 MHz, so it does a better job for FM stations at the higher end of the dial. If two of these filters are connected in series between the antenna and scanner, the attenuation would range from 10 to 56 dB.

As you might have gathered by now, the objective of all these filters is to attenuate or reduce frequencies at which interfering signals are found while passing, with the least attenuation possible, frequencies containing signals of interest. As long as the interfering and signals of interest are located in different bands as above, the job may well lie within the capabilities of the inexpensive filters discussed above, so long as the interfering signal lies with the frequency range of the filter. However, when the interfering signal comes from within the band of interest and lies close in frequency to the desired public safety

station, then a filter such as the Grove FTR-2 may not be sharp enough in its rejection band, so that, even though it can be tuned within the public safety band, it may reject too broad a range of frequencies, reducing the signals of interest almost as much as the interfering signals. For example, is the interference comes from the weather channel at 162.550 MHz tuning the filter to this frequency may well knock down the entire railroad band from 160.215 to 161.565 MHz to an unacceptable level. I do not claim that this filter will not work in such an application, only that you should expect some attenuation of desired signals and that your own ear is the best judge of how much is acceptable.

When interfering signals lie close in frequency to those of interest, the unsual solution in commercial application is to employ a cavity filter which has a very sharp and deep rejection notch. The cavity gets its name form the large air inductor used to produce the sharp notch at RF frequencies. The cavity is expensive, but it will certainly do the job even if the interfering and desired signals are only a few tens of kilohertz apart. A situation calling for a cavity is reported by a reader with strong interference from the weather station at 162.475 MHz, which, due to IF mixes, appears at several points in the VHF-High band at frequencies of interest to him. A cavity filter inserted in his transmission line between antenna and scanner and tuned carefully to 162.475 MHz should eliminate his interference almost completely.

Another reader reports an interesting problem in which a cavity might be used. His two local police channels are only 180 kHz apart and the transmitter is four blocks from his house. Transmissions on either one of thse frequencies is received on the other by his Regency M-400 scanner if that other channels is encountered first in the scanning sequence. Furthermore, this cross channel reception is accompanied by a loud buzz and distorted speech. It is possible that this problem originates in a transmitter combiner with insufficient isolation at the transmitter. In this case, police mobile units close to the base should experience the same problem he does on his scanner. More likely, however, is the possibility that the interaction is taking place in his scanner and not at the transmitter. In such a case, he could place a cavity in his transmissionline to eliminate one of the police channels, thereby removing the interference to the other channel, but of course one of the channels is lost to that scanner. It is doubtful that the Grove FTR-2, or the apparantly identical MJF-760 of which he writes, would help much since the the rejection band is probably too broad to attenuate one of his police channels without reducing the other to an unacceptable degree.

There is another possible solution to this problem which does not require filters, but only another scanner. It involves getting an older model crystal controlled scanner with an IF different from that used by the M-400. One, or more, of the strong local stations are put into it and taken off the M-400. Using the different IFs keeps the two scanners from locking each other up.

As you can see, I'm not an expert on these interference problems. I would certainly suggest that you contact local RCMA members and amateur operators who know more than I do and can understand local conditions better than I can. Also, I have a question for the readership. If anyone knows how to cut coax wave-trap stub filters for transmission lines, please let me know and I'll publish the formulas and other instructions. See you next month.

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BELOW 30 MHZ

Robert Horvitz, editor

This column is for AM, SSB, RTTY, CW & FAX reception reports, explanatory notes, articles, news & questions related to HF utilities. Services covered in this column include civilian aeronautical, coastal/marine, government, military, weather, etc. – essentially everything except broadcasting, CB & amateur radio. Send to: Robert Horvitz, 54 East Manning St., Providence, RI 02906 If you need a reception report form, please enclose a SASE with your request.

The main pleasure of editing this column is getting letters like this one from Dick Stedman (MA-071), dated April 28: "There is nothing like a good crisis (Falkland Islands) to cause one to become glued to a shortwave receiver. Mine has yielded the most fascinating monitoring I've yet experienced in many years of addiction to radios. Specifically, I am referring to the communications surrounding Haig's shuttle diplomacy between Argentina and Great Britain... They have provided a rare insight into the operation of our government at its highest levels, and much of the communication has contained subject matter fit for network news shows! A detailed log is not possible; however, I have attached a list of the frequencies monitored in conjunction with these missions... [redacted] verified through diligent monitoring and considerable frequency searching with my Sony ICF-2001. This receiver's memory capabilities have proven invaluable in keeping up with the constant changing of channels by the parties involved. The channel identifiers are normally all that is referred to in a frequency change—unlike other Air Force HF communications.

"The amount of clear voice traffic during these missions seems as though it may be due to problems currently being experienced with UHF satellite networks, which might normally be used. The inability of the communicators to find usable satellite channels became apparent on April 9, while trying to arrange a phone patch between Haig (en route from London to Buenos Aires) and President Reagan (on vacation in Barbados). Much to my great surprise, it was decided to use '[redacted]' (17.993 USB) for this phone patch. So at 1900Z, the unscrambled conversation between 'Rawhide' (Reagan) and 'Fadeaway' (Haig) was monitored with perfect clarity. Doubtless a rare event on HF! I hope others in our hobby were able to share this excitement.

"While my accompanying list includes many of the frequencies that have been used in the last few weeks of shuttle diplomacy, it is far from complete. On several occasions, the parties switched to channel #s that I could not search out from among known Air Force frequencies. Some were certainly RTTY or VHF/UHF satellite links, but many others were obviously HF SSB due to the discussions of equipment and conditions..."

SAM 86972 (Haig's aircraft during Falklands shuttle)

MHz
11.226
13.241
15.015
15.048
17.972
17.993
18.027
20.053
20.885
23.265
24.???
25.578
26.471
28.899

Dick's outstanding report was perfectly complemented by a clipping from the Chicago Sun-Times, April 17, sent by Ed Sirovy (IL-004). This story, by Washington Post reporters Paul Taylor & George C. Wilson, ran on the front page under the headline, "Plane talk—Reagan, Haig crisis chat intercepted": "Telephone discussions about the Falkland Islands crisis between President Reagan and an airborne Secretary of State Alexander M. Haig Jr. were intercepted because neither chose to use a scrambler phone, administration sources said Friday. A transcript of a 3½-minute conversation—in which only Reagan's comments were recorded because of static obliterating Haig's remarks—was published Friday /April 16/ by columnist Jack Anderson. Anderson also released another transcript of what appeared to be a separate conversation, in which both voices were heard. Anderson said he was given a tape by a source he declined to identify. The talks, which took place while Haig was flying from London to Buenos Aires and as Reagan was on a working vacation in Barbados, review Haig's efforts at shuttle diplomacy between Britain and Argen-

tina but involve nothing of a top-secret nature. Government communications specialists said Friday it is not unusual for the President or a Cabinet secretary to forgo the use of a secure phone and talk over open lines, especially if the connection is between two remote spots. The sources said Haig had a secure phone on his Air Force plane but elected not to use it. 'They do it all the time,' one security official said, despairing of the reluctance of officials to use the cumbersome, boxlike apparatus that scrambles conversations at one end and decodes them at the other. The specialist speculated that Haig and Reagan talked over a high-frequency connection that would be easy for radio hobbyists to intercept...

"Here is a transcript of one conversation: Reagan: 'Al, hello, Al. I'm glad the British fleet doesn't move that fast. You must have been in the air for about 12 hours now and (pause). There's going to be an uphill struggle. Did you get any idea as to whether the emotion that you met in your meetings goes out beyond the Parliament to the people as well? (10-sec pause: Haig reply) It sounded as if there was not much acceptance of the multinational presence here. Are there any variants of that you think she might go for? Over. (13-sec pause: Haig) Oh, that sounds good. Incidentally, that submarine of theirs, ah, do you think it's apt to go ahead with retribution and sink anything within the 200 miles and would that be enough to vindicate them? Over. (14-sec pause: Haig) Oh, that's good. Well, I won't ask you to speculate on any next steps because I know you haven't talked yet there in Buenos Aires. But, in those talks, if it's helpful at all, why, don't hold back on making me the bad guy and insisting on restraint if that's necessary. Over. (19-sec pause: Haig) OK. Well, I know it's a tough one and an uphill fight. Just let us know if there's anything at this end that we can do to be of help. And, ah, good luck. (pause) Over. (8-sec pause: Haig) Just did today. (pause) Had a good swim in this ocean that you're looking down on. And it was wonderful. Well, OK, I'll make it over and out, then, or /unless/ you've got something else. OK, good luck.'..."

In his cover letter, Ed Sirovy notes that Jack Anderson's publication of this transcript "violates Sec. 605 (in spades) and maybe the Espionage Act and a few others." Correct, near as I can tell. But having appeared in a syndicated column and at least one major city daily, there seems to be no reason why we in RCMA should forgo the opportunity of sharing already-public knowledge, on a subject of great interest to the membership, when such sharing is normally impossible. We should not knowingly violate the law by being the first to publish such a transcript, but when the cherry's already been popped--that's a different matter. Same with the text from the Russian sub (June issue). The interceptability of HF SSB is well known to all governments, as is the existence of tens of thousands of receivers and monitoring enthusiasts. [redacted] Sorry for the sermon, folks, but I want to make it clear that although transcripts of monitored conversations have appeared here 2 months in a row, both were special cases and do not challenge existing legal boundaries, as I presently understand them. Many thanks to both Dick & Ed for their dynamite contributions!

In the May issue of the Review of International Broadcasting, Luís Saint-Germain reported that after the Argentine forces first landed on Las Islas Malvinas, a new station, LU4ERM, began beaming personal--not military--news from the islands to the mainland on 7.075, 14.150 or 21.225 LSB in the ham bands.

Radio Netherlands' MEDIA NETWORK show said on April 8: "On Monday night /April 5/, from about 1830 UTC onwards, one /frequency/, 24146 kHz USB, was rather busy, trying to activate antennas and transmitters with a number of tests. (Tape recording) It's impossible to verify that the voice you're listening to is actually based on the Falklands, but it would appear that communications links are being set up. Last night, Wednesday, proved this to be the case. Tuning at 1745 UTC on 24146 kHz, it was possible to monitor what appeared to be an off-air relay of 'Radio Nacional Islas Malvinas' being fed to Buenos Aires, with the Argentinian celebrations. (Tape recording)... All this also leads one to wonder whether the links with the British scientific groups in the Antarctic have been lost as well, since some shortwave links pass through the Falklands. The Appleton Research Laboratories in Reading, England, have also presumably lost their ionospheric research station on the Falklands, which made regular ionosondes of shortwave of some very interesting parts of the ionosphere down there..."

And on April 30 on the Radio Netherlands newscast at 0230Z: "It appears that the British radiotelephone terminal in the Falklands was back on the air again in English today /April 29?/. According to the Radio Netherlands monitoring service, the transmission consisted of a closed-loop tape with a brief station identification. It was the first time since the Argentinian occupation of the Falklands that the station was on the air in English. After the invasion, the troops used it for a while for communications with Buenos Aires. Before the invasion, the transmitter, which is owned by Cable & Wireless, Ltd., was used to maintain telephone links with London. The frequency of the monitored transmission was 24145 kHz USB."

As I sit here typing this, it is May 1, and the Brits began bombing the airfield at Port Stanley this morning. Minister of Defense Francis Pym is flying to Washington for a meeting with Haig--so far evading my attempts to monitor him en route. Next month's column will probably contain more (old) news about this crisis.

.....

More from Ian

RAF Flight Watch Centres (British equivalent of USAF Airways stations)

Voicecall	CWcall	ch#	MHz/USB	Used
Cyprus	GFW	1	4.730*	24hrs
		2	6.751*	1600-0500Z
		2	18.018	0500-1600Z
		3	11.234	24hrs
Gibraltar	GFG	1	4.742+	2000-0700Z
		1	11.234+	0700-2000Z
Upavon	MQP	1	23.220	24hrs
		2	4.742	"
		3	9.032	"
		4	11.234@	"

*weather broadcasts 30 minutes after hour
+guarded 24hrs @secondary

RAAF Communication System (Australia)

During 0900-2100Z, stations at Darwin, Perth, Sydney & Townsville use 3.032, 5.688, 5.695 (SAR only) & 8.975. During 2100-0900Z, these stations use 5.695 (SAR only), 8.975, 11.235 & 13.205. Modes: USB, AME & CW. RAAF station Amberley (voicecall "Amber") uses 8.980 primary & 11.214 secondary; Mondays-Thursdays 2200-0700Z, Fridays 2200-0500Z; USB only.

Canadian Military Aeronautical Communication System (MACS):

Voice-call	CW-call	MHz (all channels USB/CW except for Victoria, which is AM)
Lahr	VEG	3.092 4.704 5.690 6.705 9.006 11.233 13.231 13.257 15.031 18.012
Edmonton	VXA	3.092 4.704 5.718 6.705 6.753 9.006 11.233 13.257 15.031 15.035 17.995 18.012
Trenton	CHR	3.092 4.704 5.718, 6.705 6.753 9.006 11.233 13.257 15.031 15.035. 17.995 18.012 23.250
St. John's	CJX	3.092 4.704 5.718 6.705 6.753* 9.006 11.233 13.257 15.031 15.035* 17.995 18.012 *broadcast only
Victoria	RCC	5.718

More on Aero (R)

You may recall that in the May issue, Ian described some aspects of the new HF Aero(R) band plan. In his latest letter, he advises that the changes stem not, as he had said, from the 1979 General WARC, but from the 1978 Aero Mobile WARC. To be really picky about this, while the new plan was indeed devised at the 78 Conference, it did not become part of the ITU Radio Regs until the 79 Conference. So in my opinion, either date is correct.

Anyway, both Ed Sirovy and Michael Yanul (IL-014) have since sent copies of the 2/2/82 issue of the Federal Register, which presents the plan in the form of amendments to the Code of Federal Regulations Title 47, Chapter 1, Part 87. New interim allocations took effect Feb 18--making almost half of the ICAO en-route fqs published here in the May issue obsolete. How embarassing! And the allocations will change again next year. A list of the new & forthcoming allocations appears on the next page. George Dubois (OR-001), whose excellent writing is usually found elsewhere in the Newsletter, wrote to point out a "slight error" in the May column: "ARINC does not provide communications for Air Traffic Control. They provide communications for the En-route service, which is a little different." That may be, but I was quoting ARINC's study for the DCA verbatim at that point--though the comment followed a dis-

cussion of the varied arrangements ARINC has with the FAA and the air carriers: in some cases, ARINC owns & operates a facility; or owns it but leases it to a carrier; or the FAA owns it but ARINC operates it; etc., etc. It's complicated. George may be right (he usually is!). Finally, Robert Grove sent a copy of ARINC's notice of changes in their international HF air-ground radiotelephone service that were implemented Feb 18 in consequence of the new allocations. The notice advises that "the ICAO HF transition program establishes the compulsory use of the...(upper sideband) mode of emission for all civil aeronautical mobile radiotelephone HF communications" effective 0001Z, Feb 1 82. Combining the Fed'l Register & ARINC notices, here are:

The New & Forthcoming ICAO En-route Voice Frequencies

Major World Air Route Areas (MWARAs) given here relate to the voice nets shown on the map in the May issue as regional consolidations. THIS LIST SUPERCEDES THE LIST IN THE MAY ISSUE. a) = available now & until Feb 1 83 b) = available after 0001Z, Feb 1 83 underlined = implemented by ARINC as of Feb 18 82

Central East Pacific--CEP: a) 3.001 3.467 5.554 5.603 8.843 11.282 13.261 13.300 13.336 17.904 b) 2.869 3.413 4.657 5.547 5.574 6.673 8.843 10.057 11.282 13.300 17.904

Central West Pacific--CWP: a) 2.896 4.675 5.505 6.631 8.854 11.303 13.300 17.904 b) 2.998 3.455 4.666 5.652 5.661 6.532 6.562 8.903 10.081 11.384 13.300 17.904

North Pacific--NP: a) 2.910 5.589 6.655 8.938 13.300 17.904 b) 2.932 5.628 6.655 6.661 10.048 11.330 13.300 17.904

South Pacific--SP: a) 2.945 5.559 5.643 8.847 11.327 13.300 17.904 b) 3.467 5.559 5.643 8.867 10.084 11.327 13.300 17.904

North Atlantic--NAT: a) 2.987 2.962 2.868 2.931 5.624 5.610 5.673 5.638 8.945 8.889 8.879 8.891 11.303 13.291 13.306 17.946 b) 2.872 2.899 2.962 2.971 3.016 3.476 4.675 5.598 5.616 5.649 6.622 6.628 8.825 8.831 8.864 8.879 8.891 8.906 11.279 11.309 11.336 13.291 13.306 17.946

Europe--EUR: a) 3.479 4.689 6.582 10.084 17.941 b) 3.479 5.661 6.598 10.084 13.288 17.961

South America--SAM: a) 2.889 2.910 4.696 5.582 6.666 8.847 8.826 10.096 11.360 13.297 17.907 b) 2.944 3.479 4.669 5.526 6.649 8.855 10.024 10.096 11.360 13.297 17.907

South Atlantic--SAT: a) 2.875 3.432 5.565 6.610 8.882 10.049 13.357 17.955 b) 2.854 2.935 3.452 5.565 6.535 8.861 11.291 13.315 13.357 17.955

Southeast Asia--SEA: a) 2.987 2.868 5.645 5.624 5.673 8.840 8.882 11.396 13.309 13.288 17.907 b) 3.470 3.485 5.649 5.655 6.556 8.942 10.066 11.396 13.309 13.318 17.907

East Asia--EA: a) 2.987 5.670 5.673 8.931 11.396 13.297 13.303 13.309 17.907 b) 3.016 3.485 3.491 5.655 5.670 6.571 8.897 10.042 11.396 13.297 13.303 13.309 17.907

Middle East--MID: a) 3.404 3.446 5.603 6.624 8.847 10.009 13.336 17.961 b) 2.944 2.992 3.467 3.473 4.669 5.667 5.658 6.625 6.631 8.918 8.951 10.018 11.375 13.288 13.312 17.961

Africa--AFI: a) 2.868 3.411 2.917 2.966 5.484 5.491 5.498 5.540 5.519 6.638 5.505 5.491 5.498 6.589 4.682 5.498 5.659 6.638 8.826 8.903 8.924 11.300 13.304 13.336 17.961 b) 2.851 2.878 3.419 3.425 3.467 4.657 5.493 5.652 5.658 6.559 6.574 6.673 8.894 8.903 8.894 11.300 13.273 13.288 13.294 17.961

Indian Ocean--INO: a) 3.481 5.634 8.875 13.306 17.961 b) 3.476 5.634 8.879 13.306 17.961

North Central Asia--NCA: a) 3.425 3.495 6.533 6.589 6.603 10.096 13.303 b) 3.004 3.019 4.678 5.646 5.664 6.592 10.096 13.303 13.315 17.958

Caribbean--CAR: a) 2.952 2.966 5.568 5.550 6.540 6.561 8.840 8.959 11.396 11.387 13.297 17.907 b) 2.887 3.455 5.520 5.550 6.577 6.586 8.846 8.918 11.396 11.387 13.297 17.907

I really showed my ignorance in the May issue not knowing what LDOC channels were. The Federal Register explains: "Long Distance Operational Control communications provide for the exercise of authority over the initiation, continuation, diversion or termination of a flight affecting the safety of the aircraft & the regularity & efficiency of a flight." Steve Handler's Radio Communications Guide says LDOC "is used by the airlines to talk directly with their aircraft. Company problems are often the topic of discussion. On occasion weather & flight information is also talked about. Some airlines operate their own base station, while others use the services of a private corporation such as ARINC." The new worldwide LDOC allocations are: a) 6.526 10.093 13.356 13.348 17.925 21.996 b) 3.013 3.494 5.538 6.637 6.640 8.933 10.033 10.075 11.342 11.348 13.330 13.348 17.925 21.964 Next month: the new & forthcoming domestic HF aero allocations

More News, etc.

From Aviation Week & Space Technology, 4/26/82: "USAF is moving rapidly to exploit a new nuclear-resistant communications technique that uses groundwave & operates at low frequency, slightly below the commercial radio broadcast band. It was developed by R&D Associates, Marina del Ray, CA, & the company will install an 8-node network, using mostly commercially available equipment, to interconnect Strategic Air Command & Aerospace Defense Command headquarters with 11 SAC bomber bases during the next 18-24 months, according to /Gen. Michael H. Alexander, deputy for strategic systems at USAF's Electronic Systems Div./. Within a few months, Electronic Systems Div. will request proposals for a 40-node network, called GWEN (Ground Wave Emergency Network), that will interconnect all SAC bomber & missile bases & also tie into Washington. Eventually the nuclear-resistant network may be expanded to 400-500 nodes to provide full coverage of the continental US, Alexander said."

Published a year ago but just coming to my attention is the Environmental Impact Statement for the over-the-horizon backscatter radar installation in Maine. Available from NTIS, Springfield, VA 22161, as AD-A104 351/2, price $19.50 on paper, $4.00 on fiche. Title is Draft Supplement to Final Environmental Statement on Continental US (CONUS) Over-The-Horizon Backscatter (OTH-B) Radar System, Penobscot, Washington, Somerset Counties, Maine, Aug 81, 228 pp. This study considers various sites & distributions of operations, emphasis on biological effects of radar emissions on surrounding locale. I haven't read it yet, so will not attempt to characterize its findings. It's this draft report that seems to have the bulk of the info. The final EIS is only 18 pp long! It can be ordered as AD-A106 870/9 for $4 (only on microfiche): "The action proposed in this supplement is to locate the integrated operations, maintenance & security facility at Bangor International Airport... Alternatives are locating at Bucks Harbor the maintenance & security personell who support the Washington County receiver site, but leaving the maintenance & security personnel for the operations center & the Somerset County transmitter site with the operations personnel at Bangor...; and not deploying either the 60° or the 180° system."

Kyodo news agency carried a story last Nov 27 that mentioned in passing that Japanese "police now have a nationwide shortwave communication network as well as their own communication circuits. The Japanese National Railways (JNR) also introduced a shortwave wireless circuit..." Can anyone provide details on these systems?

More Corrections

NTIS prices went up at the start of 1982. The prices I quoted in the May issue for Worldwide Crisis Alerting Network, Phase II. Task 2. Identification of Existing Systems, were in effect last year when it was published and when I bought my copy. According to the 82 price-list, it's now $19.50 on paper, $4 on fiche. Though the new Aero (R) plan makes many groups of fqs in the study outdated, the descriptions of systems & operations are still very interesting. It's rare to find such scope and detail in one text.

In the June issue, I quoted an article by Harry Feigleson to the effect that a saftey-and-distress Mobile WARC was scheduled for March 82. A call to the FCC revealed that it was actually postponed to Feb 83; and the followup session originally set for 86 has been pushed back to Sept 88. Comments, plans & proposals for the Feb 83 session are being gathered in FCC Docket 80-184. See you again next month!

CANADA

Send Canadian frequency information, radio system details and other information relating to Canadian monitor radio listening and questions to:
Robert Berezowski, 5832 Dalhousie Drive NW, Calgary, Alberta T3A 1T1 Canada.

Well gang, I'm free! At 6:30 this afternoon I finished writing my last final exam. Boy it feels great. Best of all, I survived. Now I have four months to my own.

First on the agenda is to clean my room out. If I recall correctly, it looks like several bombs have hit. The reason I have forgotten is that for the last little while, I haven't been able to get the door open. I figure that a few, properly placed charges of TNT will get the door open. Anyway I have a lot of material this month so let's get started.

In the April and May issues I ran a list of material from Can-066 for the Windsor area. I have received a couple of corrections from two other members in the Windsor area, Bob (CAN-024) and David (CAN-037). Bob says that the frequency for the Provincial Ambulance Administration is in error. Channel 3 is 149.410 rather than 149.440. David says the Essex Police Dept use 142.440 with call sign XJF-753. The frequency of 458.125 is no longer in use. David also adds the following:

Chatham, Ont	Police Dept.	XJF 56	142.185
	Fire Dept.		154.680
Leamington, Ont.	Police Dept.		142.935
	Fire Dept.		154.010
Kingsville, Ont.	Police Dept.		142.935
	Fire Dept.		159.270
Harrow, Ont.	Fire Dept.		158.730
(?)	Vetern Taxi Co.		140.340
			140.910

Thanks for the information Bob and Dave. From two other members I have received several newspaper articles on the new OPP radio system. I don't have room to publish them all, but here are some summarized excerpts. The articles came from Bruce (CAN-019) and Burt (CAN-011).

The system is expected to be fully operational by late 1982. Every police vehicle in the province will receive new equipment. This includes motorcycles, boats and helicopters. The new system will improve rural radio reception, and streamline dispatch and response to calls for assistance. As of late March/82, about 50% of the $30 to $40 million system was completed. However, a problem has come up.

Various environmental groups are protesting the construction of the microwave towers required for the system. 100 towers across the province are to be built in a grid pattern. Apparently they believe the radio waves will be harmful to their health. (Editor's comment: they think that the microwaves will make them walk in their sleep, and unfortunately they don't seem to realize that the microwave radiation from the OPP system is negligible when compared to all the other sources) Several of these groups are demanding public hearings on the tower construction. If these hearings are held, long delays in completion of the system are ensured.

None of the articles go into details of the microwave capabilities of the system. I would think these are point to point links between the various radio sites, carrying voice and/or data. I would think that the mobile equipment (for example in the vehicles) would still be VHF or UHF. Any more information from members will be printed.

From yours truly, I have some more information on SARSAT. The information comes from two articles printed in the Calgary Herald. Apparently the Ministry of Transport has now made it mandatory for ALL pilots to have Emergency Locator Transmitters (ELT) installed in their aircraft. These ELTs are an essential element of the $90 million system. I wrote some information on SARSAT in the Sept. 81 column. Basically it uses satellites to locate downed aircraft and automatically relays the location (within 20 km) to the nearest rescue co-ordination centre. In Canada these centres are staffed by the DND and located in Victoria, Edmonton, Trenton, and Halifax. If the system works as well as expected, the valuable time wasted in finding the location of downed aircraft anywhere in the world will be greatly reduced, or eliminated. If any member wants more information on SARSAT, I will supply the articles for a SASE.

Bruce (CAN-019) advises me that the 1982 edition of the Canadian Railway Radio Guide is now available from Gansel Publications. I have not yet seen a copy, but I hear that it is a very good publication if you are interested in railway communications. The price is $6.00 and the address is P.O. Box 1108, Niagara on the Lake, Ontario, L0S 1J0.

The following DND aeronautical information comes from Guy (CAN-031). I have also included with this column an excerpt from some material Bruce (CAN-019) sent me. I will probably publish more of his material next month, but this month I have included a short report he wrote on his experiences with the BC 220RC. Any other member finding similar problems with the BC 220RC can write to me and I will put it in the column. With that I will sign off for this month, with the promise that I will return next month. Untill then, good listening.

CFB TRENTON, ONT.	
TML:	124.35 324.3
TWR:	126.2 236.6 226.8
	121.5 243.0
GND:	121.9 275.8
A/G: Base Ops	268.0
ATIS:	257.7
VDF:	121.9 124.35 125.25
	126.2 128.4 134.1
	121.5
ILS:	109.7
RADAR:	125.25 128.4 289.4
	367.8

CFS GANDER,NFLD (also GANDER INTL A/P)	
RADIO (FSS):	126.7 122.5 123.4Pvt advsy
	121.5 243.0 112.7tx only
(radar) ARR:	119.5 384.5
TWR:	118.1 236.6 121.5 243.0
GND:	121.9 275.8
(radar) DEP:	119.5 384.5
INTL AIR CARRIER:	126.9 127.1 127.9
VOT:	114.8
VORTAC:	112.7
VDF:	118.1 121.9 121.5
ILS:	109.5 109.9
RADAR:	118.7 289.4 121.5
	243.0 109.5tx only

From GUY CAN-031
Military UHF Frequencies in use at CDN airports other than CDN Forces Bases and combined CFB's/MOT airports

Atikokan/Crystal Lake, Ont
Atikokan Municipal, Ont
Baie-Comeau, PQ
Burwash, YT
Fort Chimo, PQ
Fort Chipewyan, Alta
Frobisher, NWT
Kapuskasing, Ont
Medecine Hat, Alta
Mont-Joli, PQ
Poste-de-la-Baleine, PQ
Quesnel, BC
Resolute, NWT
Schefferville, PQ
Sherbrooke, PQ
Sioux Lookout, Ont
The Pas, Man
Vermilion, Alta
Whitecourt, Alta
Wiarton, Ont
Williams Lake, BC
Coral Harbour, NWT

Radio (FSS): 243.0

Clinton Point, NWT
Dewar Lakes, NWT
Broughton Island, NWT
Byron Bay, NWT
Cape Dyer, NWT
Cape Hooper, NWT
Cape Parry, NWT
Cape Young, NWT
Gladman Point, NWT
Hall Beach, NWT
Jenny Lind Island, NWT
Komakuk Beach, YT
Lady Franklin Point, NWT
Longstaff Bluff, NWT
Mackar Inlet, NWT
Nicholson Peninsula, NWT
Pelly Bay, NWT
Port Hardy, BC
Shepherd Bay, NWT
Shingle Point, YT

Radio (FSS): 236.6 243.0

CAMP WAINWRIGHT, ALTA
RADIO(FSS): 49.9 (& Range Control)
229.8

The following is a short report on the Bearcat BC 220 RC, Canadian tuned model. The advantage of a lower tuning range has both a good and a bad side. Several R.C.M.A. members have expressed an interest in obtaining such a set, and I feel that you should be aware of the shortcomings of the set before paying a premium price.

First, the tuning range on VHF High is from 138.000 to 170.000 MHz. When the factory adjusted things to this range they fouled up a couple of things. In the search mode, the set now searches in 15 KHz increments instead of the 5 KHz spacing of the normal sets. Because Canadian frequencies are not usually published, it is necessary to utilise the search capabilities

of a set quite frequently. Unfortunately, the D.O.C. has not always followed the normal 15/30 KHz channel spacing. If you do not start on the correct lower frequency, you hear nothing. For example, in Ontario, most Police Department are now using repeaters with an output frequency between 142.000 and 143.500 MHz. However, if you program this range, you have to remember to start at 142.005 MHz in order to land on active frequencies.

In addition to this little quirk, I soon discovered that the engineers dealt up another little surprise. The set looses its search memory. If you were to program the above range, search for a while, go to Scan for a while, and return to Search mode, the set will fall silent. When you check, you will find that the memory has dropped 25 KHz and is now searching between the active channels. Attempts to get around this problem by deliberately programming 25 KHz above the range you want seem to be doomed to failure - for some reason the memory can't be fooled, and will drop the additional 25 KHz to put you between the active frequencies. It seems to sense when you try to fool it. It makes searching quite a bit more difficult than most sets.

The set is bothered by harmonics of Aircraft frequencies. Most sets ignore these for the most part, but the AM capabilities of the BC 220 RC seem to draw the interference right in. Our County Fire Channel is 153.800 MHz. This is the harmonic of 132.200 MHz, a fairly active Aircraft frequency in this area, and it booms through quite clearly, thank you at 3 a.m.

I dropped in to the Canadian Importer, A.C. Simmonds in Pickering, and explained these problems to a Gentleman in the ir Service Department. He was not aware of the difficulty, and promised to research the situation and get back to me as soon as possible. I have tried out several sets, and they all, without exception, have the same faults. It is one of the surest methods of establishing whether or not a set is a RC Model besides trying to enter a 138 - 144 frequency.

The set is basically a good radio, but I feel that anyone going to great lengths to obtain one, should be aware that the set is somewhat less than perfect.

contact / info wanted

This column has two purposes: to help members contact each other, and to help members obtain information directly from one another on various subjects related to 2-way communications monitoring. If you desire to converse, meet, or correspond with other members by telephone, letter, or cassette tape in a certain geographic area or with members who have similar listening interests, this is the perfect place for you to make known your interests. Remember – those who respond will do so directly, so be sure to provide your phone number, the best time to be called, or your address. Write to:

John W. Darr, P.O. Box 1652, Cheyenne, WY 82001.

ALABAMA FREQs WANTED: Codes for the following Alabama counties: Jefferson, Shelby, and St. Clair. Also for cities Mt. Brook and Leeds. Will exchange for codes he has, and will pay postage. Would like any and all frequencies of general interest for Birmingham metro area. (4-2-82) (7-8)

SCOTT CARR (AL-Ø15), P O Box 1485, Birmingham, AL 35201-1485

HELP FOR A BEARCAT 250 OWNER: Member has a Bearcat 250 scanner (ser. #41719) that had the "AUX" function quit. He'd appreciate having someone tell him how to repair

the fault -- in complete detail! Needs to know what parts are needed, etc. It seems that Bearcat has not been able to help. (4-2-82)
RICK GREGORY (KS-Ø23), 525 E 8th St, Concordia, KS 66901

WANTED: PICS & FREQs Looking for government frequencies for any area, and pictures of any monitor set-up. (4-4-82)
DAN CARTER (PA-Ø14), 2928 7th St, Lower Burrell, PA 15068

RIDESHARE WANTED: Member wishes to share a ride to greater Los Angeles RCMA meeting on monthly basis. Will pay all gas expenses, minimum $10, for ride from Riverside with member from area. (4-5-82)
DON ERICKSON (CA-RI-ØØ4), 6059 Essex St, Riverside, CA 92504 // (714) 687-5910 until midnight

AN/URR-35B MANUAL NEEDED: Member needs manual for AN/URR-35B radio which covers 220-400 MHz. If manual is available, he will copy and return. Or -- tell him where he may buy one. (4-12-82)
RONNIE STEPHEN BRATTON (VA-053), 205 Wentworth Ave NE, Roanoke, VA 24012

ATTN: COMPUTER TERMINAL OWNERS Planning a visit to New York City? Before coming, call 212-991-1664 at 300 Baud and get a list of some interesting NYC freqs. If you apply for a password on the system you can even have NYC business freqs researched. There is no charge of ANY TYPE to log on, or to use this sytem. Of course, you must have a computer terminal or home computer with terminal software to access the system. Password is also free, but you may have to wait a few days after applying. (4-22-82)
RAY + RITA NORMANDEAU (NY-16Ø), P O Box 854, NYC, NY 10108-0854

CONSTANT CONTACT NEEDED: Here's a member who needs a person in Southern California to monitor his radio frequency on a 24-hour-per-day basis. He can provide tape recorders or other necessary equipment so that monitoring will continue while you sleep, or are otherwise away from the receiver. Appealing particularly to out-of-work or retired members, for instance, who are interested in picking up a little extra money. (4-22-82)
ROB GREENSPAN (CA-LA-Ø12), 3440 Wilshire Blvd #801, Los Angeles, CA 90010 // (213) 385-5932

EDITOR's NOTE: Be aware that, on occasion, I receive requests that are absolutely unintelligible. This is particularly true of postal cards. Time, and other factors, precludes my writing to you, asking you to decipher! In fact, in this very space there should be an "ad" from somebody in Arkansas who wants to know something about railroad frequencies. At least, that's what I think he (or she) wanted. However, I can't make it out, nor can I tell who it's from. Result: no ad. If he (or, again, she) doesn't see this little caveat, I suppose there's a fair chance he (or she) will become angry when he (or she) doesn't see his (or her) ad herein.

Help yourself by helping me. If I can't read it -- or understand it -- take my word for it, it won't get printed.

WANTED: New member wishes to correspond with other members from all areas. (4-23-82)
AMY POLIVKA (NE-ØØ9), 12906 Ohio Circle, Omaha, NE 68164

ATTN: INTERMOUNTAIN-AREA MEMBERS Calling all members in Utah, Idaho, Arizona, Colorado, Montana and Wyoming. Is anyone interested in forming a regional chapter of RCMA? If so, contact me with your ideas, comments, and suggestions.

ALSO -- Anyone with frequencies, unit designators, or any public service information in these areas, let's pool our info and try to come up with some kind of directory. OK? (4-25-82)
RICHARD AVERY (CA-AL-Ø2Ø), 350 South 400 West #3, Richfield, UT 84701

FEDERAL FREQ's: Would like information on obtaining a complete FCC list of Federal frequencies for the State of Oregon or U.S. Also -- police, fire, and business frequencies for the Victoria, BC, area. (4-26-82)
ROD DAVIS (OR-Ø46), PO Box 46, Canby, OR 97013

PHOENIX INFO WANTED: Member would like any freqs (fire, PD, FBI, sheriff, etc) for the Phoenix, Goodyear, Litchfield Park, Avondale, Luke AFB areas, or anything that can be received in the Goodyear area. (4-30-82)
RICHARD S BISBEE (CO-Ø3Ø), 2207 Downing Dr, Colorado Springs, CO 80909

COMMUNICATIONS PROFILE

RCMA Asst. Editor, 1 West Potomac, Williamsport, MD 21795

This column is for special projects that explain various radio systems in detail. Frequencies and radio codes of not only municipal agencies and certain federal government agencies may be listed, but also large businesses and corporations. The contribution must be lengthy enough that publishing it in one of the regular columns would not be possible. If you are inclined to submit a report as the one below appears, please follow No. 8 in the inside front cover of the Newsletter.

THE WASHINGTON STATE PATROL

By Rick Miner (Wa-001)

The primary mission of the Washington State Patrol (WSP) is highway safety and enforcement. Their conspicuous presence can be seen keeping faithful vigilance on state roads and interstate highways. While it is not unusual to find them backing up county or local agencies when needed, more often they can be found working a radar emphasis on the freeways or perhaps working with an airplane. Also, in communities near state borders, they enforce revenue laws by catching violators who evade taxes by licensing vehicles out of state.

The communications system must conquer all types of climate and terrain from rolling plains to dense forests and rugged mountains. (Not to mention a volcano) High Band VHF is used in conjunction with a statewide microwave network in 2 and 6 GHz. Many changes in the communications system have occured in the last few years to upgrade its efficiency and capabilities. With these improvements it became possible to key most remote transmitters by utilizing the "loop". Most of the repeaters in the state were no longer utilized by the base stations and the troopers began using them only in remote areas such as mountain passes and the Columbia River Gorge.

The old system was similar to the California Highway Patrol radio system. They utilized area frequencies and a statewide common. However, the area frequencies covered only a few key areas, normally those with larger populations, and in practice the statewide common was a statewide dispatch frequency. While area frequencies were were used simplex, the statewide common was used either simplex, semi-duplex or in conjunction with mobile relays. The common misconception among people in the hobby and one unfortunately printed in the newsletter, was that the old F-1 (155.475) was the dispatch frequency while the old F-2 (154.77) was a car-to-car freq. However, as with the CHP system, these two frequencies were paired. The base would dispatch on F-1, but, F-2 was the mobile to base freq.. F-1 (155.475) the state common was also the statewide car-to-car

frequency, but, they had to depress a button on the control head in order to transmit on this freq.. In fact, the mobiles had no receive capability on F-2.

The old mobile radios were Motorola type with dual front end receive capability and 110 watt output. There were two sets of concentric volume and squelch controls for the area frequency receiver and the statewide common receiver mentioned previously. These radios had 3 frequency transmit capability, on the area freq., the state common which was marked car, and on F-2 which was marked state. Some cars had a seperate multi-tone ctcss encoder control head. Cars so equiped could access various mobile relays using the state frequency (F-2) on transmit. An additional control frequency was used in some areas. I can only assume that these were outside of areas utilizing specific area frequencies so that the area position on the control head could be used.

It has long been a goal for the communications people in Bellevue to have each dispatch center in the state have its own area frrquency. (Free from interference) A furry of licensing, consolodation of dispatch facilities and better equipment made this feasible. With 155.475 gaining new status as the National Law Enforcement Emergency Frequency, it became necessary to make plans to abandon it as a dispatch frequency. Meanwhile, the new frequency assignment adopted a new statewide common frequency which would be made available to all state law enforcement agencies including Fish and Game Departments, Dept. of Social and Health Services (who control corrections), Utilities and Transportation, Weight control officers, etc. as well as various Federal agencies. Since already licensed on the NLEEF they will keep the bases and mobiles crystaled for that freq. as well as the statewide Law Enforcement Radio Network (LERN) which is available to all local agencies. The frequency for this system is 155.37 which is causing havoc with a neighboring county which uses this for their primary dispatching and isn't sure where it can license.

The new WSP frequency allocation system utilizes 15 VHF-High frequencies. These are divided into 3 common frequencies, 1 repeater control frequency and 11 area frequencies. While many of the old Motorola mobiles are still in use, WSP is getting new G.E. MASTR radios. They are 8 frequency, dual front end receive with scanning heads and 110 watt output. Again the control heads have two sets of concentric volume/squelch controls, one for the area freq. and one for the selectable transceiver. There are three rows of pushbuttons with 8 or 9 buttons each. The top row activates any of 8 ctcss tones in the encoder/decoder or no tone. The second row controls which of the 8 installed frequencies will be scaned if any. The bottom row is the select frequency transmitter. The microphone button keys either the area or select transmitter depending upon whether the button is pushed up or down before depressing it. The select transmitter typically will have the following frequencies installed:
State- 155.97 tx/rx
Rptr.- 158.79 tx/ 155.97 rx
LERN - 155.37 tx/rx
NLEC - 155.475 tx/rx
The local area freq. plus up to 3 bordering area freqs.

Several factors including new leadership in WSP and Federal and State level budget cuts have caused some re-organization of WSP's primary mission. Rumors indicate that the WSP will change from strictly a highway patrol type organization to one involving more diversified police matters. The Organized Crime and Narcotics unit may become an autonomous unit to be re-named the Washington State

Police. With Federal law enforcement agencies cutting way back the states will have to pick up some of this activity and play an ever increasing role. Only time will prove or disprove these theories. The present system that the strike force type unit uses is to do normal traffic over the normal system. When engaged in sensitive activity they will use a frequency that is not used by any department in whatever area that they are working. The sensitive traffic is transmitted over .2-watt portables and over mobiles with switchable power. Consequently it is nearly impossible to predict with any certainty which VHF frequency they will use in any given area and time.

WSP holds licenses for UHF repeaters in various locations statewide under the local government service. When we asked about this they indicated that they were not yet sure what they would use them for. Speculation runs from individual trooper portables to a system for the radio techs. Indications are that the officers in the Organized Crime and Narcotics unit are expecting new radios with very short stubby antennas on the portables. (Who knows, but, the techs aren't talking) Presently, these frequencies are used in selected mountain passes for mobile repeaters (extenders) using portables.

Typically, the dispatch centers will have equipment to transmit and receive on their area freq., the statewide common, and the LERN and NLEEC frequencies, at each of their remote sites as a minimum. The Seattle area dispatch office at Bellevue will soon also have its own frequency for data. During the transition period, many stations will continue to use F-1. Furthermore, until it has been completed, F-6 (158.79) continues to be used simplex to dispatch those units scheduled to use the new F-1. Since F-6 is the new repeater control freq. it is not uncommon to hear the basestations bring up the repeater and have the mobiles, which are not yet equipped with these new frequencies be completely oblivious to the change. Many of the remote sites are shared with other dispatch centers, thus they will be licensed for several area frequencies.

Scanners seem to be taking on added importance while the WSP is changing its role. The local station (Vancouver) has two scanners. Many of the troopers have them in their patrol vehicles. Sometimes they can be heard relaying important broadcasts by other local agencies to their fellow troopers. Most patrol vehicles are also CB equipped.

Each trooper is given his own personal patrol vehicle to take care until it reaches between 70 and 100,000 miles. Each car proudly displays a special plate bearing the letters SP and the troopers personnel number. This same number is also his radio ID number and badge number. They must have reached into the thousands because the old license plates had WSP-000 with the zeros representing a three digit number. Locally they still are three digit. 100 numbers are sergeants with numbers smaller than 100 representing officers. Numbers over 200 are troopers. X-numbers seem to be miscellaneous roles. For example, X-800 numbers are weight officers, while the local radio tech has an X-number with two digits. J-numbers seem to be Utilities and Transportation Commission officers who have police powers.

WSP does not use radio codes. Transmissions are done in the clear. They do have some localisms including zone numbers and numbers representing their favorite restaurants. They often refer to their stations by the last 4 digits of the phone number, but, when dispatching they use the name of the dispatch center's city. Since the local station is close to Portland, Oregon, (pronounced Ory-gun by the way and not Or-e-gone) so troopers have a way to verify length of residence in Washington, they have access to the local Public Utility Districts customer computer. These are called

"Alpha Checks". Reciprocity checks determine compliance with licensing requirements as to use of out of state licensed vehicles in the state. Both of these are used todetermine violations of Dept. of Revenue laws concerning sales tax.

I have included a complete frequency plan for the new WSP system, which was good as of October 1981, when Bob Gehri (We-007) and myself sat down with the WSP Communications people in Bellevue. These are the people who do planning and licensing for the entire state. Bob and I were researching the book Police and Fire Frequency Listing, which is published locally.

Their outline of the new plan indicates that one station, Bellingham which is near the Canadian border, had no planned area freq.. They seem to have run into interference problems as well as licensing problems. It continues to be one of the few stations to use F-1 (155.475) until they can find an area frequency to license. Other areas using the old F-1 are awaiting transition to the new system.

The bellance of the information provided here, begining with the district by district breakdown, was gained from exhaustive research of the F.C.C. license microfiche. Many of the licenses are new, some are expired and most are current. It has been our experience that the microfiche contains errors, often deleting and purging without any set pattern, and indiscriminantly. We have also found that WSP will continue using call signs after our record indicate expiration. Consequently, I have used some guess work determining which licenses are in use currently. Only active statewide monitoring can verify which call signs are used where and which transmitter sites are used and by which dispatch centers. Any reader information will be appreciated. I personally have spent years researching WSP, and collecting various information from people. I feel confident that while undoubtedly not 100% accurate, it is the best information available at the present time. Those VHF licenses marked as mobile relays are in most cases licenses that have been expired and purged. However, WSP has included mobile relays in their overall statewide plan. These old licenses will give the reader a starting point in finding various areas where new mobile relays will undoubtedly be established. Possible sites have not radically changed over the years and it is not inconsistant that many of the old sites will be used.

For the help that the WSP people gave us, they indicated that they had only one real concern. If we were to print specific transmitter locations, they were afraid of increased vandalism. (They have had some problems in the past.) Consequantly we have deleted specific locations here except for those licenses which go with the dispatch center itself. (No remotes) This accounts for several things. First, where duplication of call signs occur, you can figure it is a remote location. Each set of licenses follows the office(s) which use that license. Where several offices are listed, each will be dispatched by the first office in the group and will be covered by one or more of the licenses. These are all grouped by district. Licenses include: call sign, class of station and frequencies licensed (by F number). Those call signs preceeded by a transmitter location (which will only be the office themselves, if listed here) are the only ones I mean to be linked to that site. Others in the list, as you go down the column, may or may not be licensed there. Those blank areas were once filled, so don't interperate them other ways than that the dispatch office listed accesses those licensed transmitters. Obviously if the station class is FX-1 it will be at an office with a radio and not a remote site.

The following abreviations have been used:

FB BASE
FB2 MOBILE RELAY
FX1 CONTROL STATION
FX3 FIXED REPEATER STATION
UHF Depending on station type, will indicate input or output of a repeater. All of the UHF licenses include either both inputs or both outputs for both sets of frequencies listed. (EX. If station clasification indicates FX1 then it will be both UHF 458 freqs. If it indicates FB/FB2 then the 453 freqs will be correct.)

THE WASHINGTON STATE PATROL FREQUENCY ASSIGNMENT

(ALL FREQUENCIES EXCEPT F-1 ARE SIMPLEX)

F-1	155.970	(R) OR (S) STATEWIDE COMMON ALL AGENCIES
F-2	154.770	AREA DISPATCH - PORT ANGELES, KELSO, ELLENSBURG
F-3	155.580	AREA DISPATCH - SEATTLE AND SPOKANE
F-4	155.520	AREA DISPATCH - TACOMA AND KENNEWICK
F-5	154.845	AREA DISPATCH - EVERETT AND YAKIMA
F-6	158.790	CONTROL FREQUENCY FOR F-1 REPEATER
F-7	154.680	AREA DISPATCH - VANCOUVER AND OKANOGAN, SEATTLE DATA
F-8	MICROWAVE TELEPHONE	
F-9	COMMERCIAL TELEPHONE	
F-10	MICROWAVE TELETYPE	
F-11	COMMERCIAL TELETYPE	
F-12	IN PERSON	
F-13	INTER-OFFICE INTERCOM	
F-14	155.850	AREA DISPATCH - CHEHALIS
F-15	154.665	AREA DISPATCH - BREMERTON
F-16	154.695	AREA DISPATCH - HOQUIAM
F-17	154.935	AREA DISPATCH - WENATCHEE
F-18	155.505	AREA DISPATCH - MT. VERNON AND EPHRATA
F-19	154.920	AREA DISPATCH - OLYMPIA
F-L	155.370	LAW ENFORCEMENT RADIO NETWORK (L.E.R.N.)
F-N	155.475	NAT'L LAW ENFORCEMENT EMERGENCY CHANNEL (N.L.E.E.C.)

UHF ASSIGNMENT

453.475/458.475
453.925/458.925

THE ABOVE UHF FREQUENCIES ARE LICENSED STATEWIDE IN VARIOUS LOCATIONS. FUTURE USE IS UNKNOWN. PRESENTLY THESE FREQUENCIES ARE BEING UTILIZED IN MOUNTAIN PASSES WITH MOBILE REPEATERS (EXTENDERS) USING PORTABLES.

STATEWIDE LICENSES

VHF MOBILES - KA-5287
UHF MOBILES - KA-34310
TEMPORARY BASE - KCL-780
TEMPORARY BASE - KOH-326

DISTRICT I (PIERCE AND THURSTON COUNTIES)

TACOMA DISTRICT OFFICE - DISPATCH 155.52
3737 S. PUGET SOUND AVE 593-2425
TACOMA

KOA 431	FB	(N,2,4)
KOA 389	FB	(N,2,3,5,6)
KOA 589	FB	(N,2,4,6,1,15)

OLYMPIA DETATCHMENT OFFICE - DISPATCH 154.92
4242 MARTIN WAY, LACY - 754-1794

OLYMPIA	KOA 499	FB	(N,2,5,6,1,L)
MARTIN WAY OFFICE	WFE 647	FX1	(UHF)
GEN.ADMIN.BLDG.	WGB 465	FX1	(UHF)
	KOA 590	FB	(N,4,5,L)
	WXT 785	FB/FB2	(UHF)

DISTRICT II (KING COUNTY)

BELLEVUE DISTRICT OFFICE - DISPATCH 155.58, SOON ALSO 154.680 DATA
2803 156TH AVE. SE 455-7727

NORTH SEATTLE DETATCHMENT OFFICE - DISPATCHED BY BELLEVUE
15050 15TH AVE. NE 545-6670

SOUTH SEATTLE DETATCHMENT OFFICE - DISPATCHED BY BELLEVUE
15666 PACIFIC HWY. S 464-6315

NORTH BEND DETATCHMENT OFFICE - DISPATCHED BY BELLEVUE
PO BOX 345 1ST AND BALHART 888-1234

BELLEVUE	KOA 389	FB	(N,2,3,5,6)
	WFE 649	FX1	(UHF)
	KOA 389	FB	(N,2,3,6)
	KOE 436	FB	(6)
	KOA 389	FB	(N,2,3,5,6)
	KOA 288	FB	(N,2)
	KOA 389	FB	(N,2,3,5,6)
	WXT 783	FB/FB2	(UHF)
	KOA 589	FB	(N,2,4,6,1,15)
NORTH BEND	KRE 343	FB	(N,1,L)
	KOA 288	FB	(N,2)
	KOA 389	FB	(N,2,3,6)

DISTRICT III (YAKIMA, KITTITAS, BENTON, FRANKLIN, WALLA WALLA, COLUMBIA, GARFIELD AND ASOTIN COUNTIES)

UNION GAP DISTRICT OFFICE - DISPATCH 154.845
2715 RUDKIN RD. 575-2320

SUNNYSIDE DETATCHMENT OFFICE - DISPATCHED BY UNION GAP
PO BOX 518 110 STATE HWY 837-3600

UNION GAP	WFE 642	FX1	(UHF)
	KOA 585	FB	(N,2,6,1)
	KOA 585	FB	(N,2,6,1)
	WXT 778	FB/FB2	(UHF)
	KOK 918	FB	(N,2)
	KOA 585	FB	(N,2,6,1)

ELLENSBURG DETATCHMENT OFFICE - DISPATCH 154.77
RT. BOX 253 925-5303

SNOQUALMIE PASS DETATCHMENT OFFICE - DISPATCHED BY ELLENSBURG
RT. 4 BOX 36A, CLE ELUM 674-4381

ELLENSBURG	KOA 584	FB	(N,2)
	WFE 646	FX1	(UHF)
	KLI 963	FB	(N,2,1,L)
	KLF 985	FB	(N,2,1,L)
	WXT 786	FB/FB2	(UHF)
	KOA 584	FB	(N,2,6,1,18,L)

KENNEWICK DETATCHMENT OFFICE - DISPATCH 155.52
RT. 12 BOX 12450 20 S. ELY ST. 783-6102

WALLA WALLA DETATCHMENT OFFICE - DISPATCHED BY KENNEWICK
406 WELLINGTON AVE. 527-4472

KENNEWICK	WFE	640	FX1	(UHF)
	KOA	417	FB	(N,2,4,6,1,L)
	KOA	467	FB	(N,2,4,6,1,L)
	WXT	777	FB/FB2	(UHF)
	KJY	851	FB	(N,2)
	WSQ	959	FB	(N,4,1,L)
	KOA	585	FB	(N,2,6,1)
WALLA WALLA	WFE	641	FX1	(UHF)
	WXT	788	FB/FB2	(UHF)
	KCL	774	FB/FB2	(N,6)
	WSQ	961	FB	(N,4,1,L)
	WSQ	962	FB	(N,4,1,L)
	KRE	494	FB	(N,3,6,1,L)

DISTRICT IV (SPOKANE,WHITMAN, ADAMS,LINCOLN,FERRY, STEVENS,PEND OREILLE COUNTIES)

SPOKANE DISTRICT OFFICE - 155.58
E. 7421 1ST. AVE. 456-4101

GEIGER FIELD DETATCHMENT OFFICE - DISPATCHED BY SPOKANE

NORTH SPOKANE DETATCHMENT OFFICE - DISPATCHED BY SPOKANE
N. 6604 ATLANTIC 456-4117

COLFAX DETATCHMENT OFFICE - DISPATCHED BY SPOKANE
N. 300 MILL ST. 397-2831

RITZVILLE DETATCHMENT OFFICE - DISPATCHED BY SPOKANE
403 E. 1ST AVE. 659-1210

COLVILLE DETATCHMENT OFFICE - DISPATCHED BY SPOKANE
352 E. BIRCH # 102 684-5231

SPOKANE	KOA	592	FB	(N,2,3,6,1,15,L)	(42.54)
	WFE	650	FX1	(UHF)	
	KOG	324	FB	(N,2,6)	
	KCL	778	FB/FB2	(N,6)	
	KOA	592	FB	(N,2,3,6,15)	
	KCL	777	FB/FB2	(N)	
	KOA	592	FB	(N,2,3,6,1)	
	KCL	775	FB/FB2	(N,3,1,L)	
	WXT	784	FB/FB2	(UHF)	
	KOA	592	FB	(N,2,3,6,1)	
	WXT	780	FB/FB2	(UHF)	
	KRE	495	FB	(N,6,1,L)	
	KCL	776	FB/FB2	(N)	
	KLS	483	FB	(N,3,1,L)	
	KOM	91	FX1	(2)	
	KNC	699	FB	(N,2)	
	WFE	644	FX1	(UHF)	
	WSQ	962	FB	(N,4,1,L)	
	WSQ	960	FB	(N,3,1,L)	

DISTRICT V (CLARK, COWLITZ, LEWIS, SKAMANIA, KLICKITAT, WAHKIAKUM COUNTIES)

VANCOUVER DISTRICT OFFICE - DISPATCH 154.68
605 E. EVERGREEN BLVD. 696-6162

GOLDENDALE DETATCHMENT OFFICE - DISPATCHED BY VANCOUVER
PO BOX 105 773-3775

VANCOUVER	KRE 490	FB	(N,1,L,17,16)(460)
	KOA 345	FB/FB2	(N,2,6,1,16)(460)
	WFY 943	FB/FB2	(UHF)
	KOA 345	FB	(N,2,6,1,16)(460)
	KOQ 345	FB	(N,1,17,L)(460)
	WSQ 993	FB	(N,1,17,L)
	WQA 818	FB	(N,1,L,?)
	KOE 437	FB	(N,6,1,14,L)

KELSO DETATCHMENT OFFICE - DISPATCH 154.77
1823 BAKER WY. 577-2050

KELSO	KOA 582	FB	(N,2)
	KOA 582	FB	(N,2,1,6,L)
	KOE 437	FB	(N,6,1,14,L)

CHEHALIS DETATCHMENT OFFICE - DISPATCH 155.85
850 NW LOUISIANA AVE. 748-6633

CHEHALIS	WFE 643	FX1	(UHF)
	KOA 586	FB	(N,2,14)
	KOE 437	FB/FB2	(N,6,1,14,L)
	KCL 771	FB/FB2	(N,1,14,L)
	KOA 586	FB	(N,2,16,L)

DISTRICT VI (CHELAN, DOUGLAS, GRANT, OKANOGAN COUNTIES)

WENATCHEE DISTRICT OFFICE - DISPATCH 154.935
1517 N. WENATCHEE AVE. 662-7138

WENATCHEE	KPQ 67	FX1	(14) (CONTROL)
	WFE 648	FX1	(UHF)
	KOA 587	FB	(N,2,1,17,L)
	KOA 587	FB	(N,2,4,6,1,17,L)
	WXT 782	FB/FB2	(UHF)
	KCT 606	FB/FB2	(N,6,1)
	KON 926	FB	(6)
	KPQ 66	FX3	(154.89) (REPEAT)
	KOE 443	FB	(N,2,6,18,1)

OKANOGAN DETATCHMENT OFFICE - DISPATCH 154.68
PO BOX 486 EASTSIDE RD AND OAK ST. 422-3800

OKANOGAN	KPQ 68	FX1	(14) (CONTROL)
	KOA 439	FB	(N,2,6)
	WXT 781	FB/FB2	(UHF)
	KCT 606	FB/FB2	(N,6,1)
	KON 926	FB	(6)
	KPQ 66	FX3	(154.89) (REPEAT)

EPHRATA DETATCHMENT OFFICE - DISPATCH 155.505
111 4TH AVE. NW 754-3571

MOSES LAKE DETATCHMENT OFFICE - DISPATCHED BY EPHRATA
PO BOX 1005 (PRITCHARD AND LAGOONA) 765-6175

EPHRATA	KOE 443	FB	(N,2,6,18,1)
	KRE 329	FB	(N,3,6,1,18,L)

	KOE 443	FB	(N,2,6,18,1)
	KOE 443	FB	(N,2,6,18,1)
	KOA 584	FB	(N,2,6,18,1,L)
	KOE 443	FB	(N,2,6,18,1)
MOSES LAKE	KKK 347	FB	(N,1,18,L)
	KCL 777	FB/FB2	(N)
	KRE 495	FB	(N,6,1,L)

DISTRICT VII (SNOHOMISH, SKAGIT, WHATCOM, ISLAND, AND SAN JUAN COUNTIES)

EVERETT DISTRICT OFFICE - DISPATCH 154.845
20TH AND CHESTNUT 259-8585

MONROE DETATCHMENT OFFICE - DISPATCHED BY EVERETT
209 E. MAIN 794-5800

EVERETT	KOA 498	FB	(N,2)
	WFE 651	FX1	(UHF)
	KOA 288	FB	(N,2)
	KOA 389	FB	(N,2,3,5,6)
	WXT 783	FB/FB2	(UHF)
	KLS 394	FB	(N,1,L)

MT. VERNON DETATCHMENT OFFICE - DISPATCH 155.505
1220 MEMORIAL HWY. 424-4264

OAK HARBOR DETATCHMENT OFFICE - DISPATCHED BY MT.VERNON
4086 400TH AVE W. 675-0718

MT.VERNON	WYC 554	FB	(N,2,6,1,18)
	WFE 652	FX1	(UHF)
	WYC 554	FB	(N,2,6,1,18)
	KOE 438	FB	(6)
	WXT 779	FB/FB2	(UHF)
	WYC 554	FB	(N,2,6,1,18)
	KCL 767	FB/FB2	(N)
	WYC 554	FB	(N,2,6,1,18)

BELLINGHAM DETATCHMENT OFFICE - DISPATCH 155.475, (FUTURE ???)
2600 MCLEOD RD. 676-2076

BELLINGHAM	WFE 653	FX1	(UHF)
	KCL 766	FB/FB2	(N,6)
	KOA 583	FB	(N,2,6,L)
	WYF 944	FB/FB2	(UHF)

DISTRICT VIII (KITSAP, CLALLAM, JEFFERSON, MASON, GRAYS HARBOR, AND PACIFIC COUNTIES)

BREMERTON DISTRICT OFFICE - DISPATCH 154.665
4846 AUTO CENTER WAY 478-4646

SHELTON DETATCHMENT OFFICE - DISPATCHED BY BREMERTON
SE 64 LYNCH RD. 426-5596

POULSBO DETATCHMENT OFFICE - DISPATCHED BY BREMERTON
22065 STATE HWY 3 NW SCAN 356-4724

	KOA 589	FB	(N,2,4,6,1,15)
	KOA 389	FB	(N,2,6,1,18)

PORT ANGELES DETATCHMENT OFFICE - DISPATCH 154.77
401 E. 8TH 457-7433

PORT ANGELES	KOA 588	FB	(N,2,6)
	KCL 779	FB/FB2	(N,6)
	KOA 389	FB	(N,2,6,1,18)

HOQUIAM DETATCHMENT OFFICE - DISPATCH 154.695
3111 PACIFIC AVE 533-9332

RAYMOND DETATCHMENT OFFICE - DISPATCHED BY HOQUIAM
216 2ND 942-3160

HOQUIAM	WFE 645	FX1	(UHF)
	WXT 787	FB/FB2	(UHF)
	KOA 586	FB	(N,2,16,1,L)
	WXT 776	FB/FB2	(UHF)
	KCL 773	FB/FB2	(N)
	KJE 641	FB	(N,6,1,16,L)

FCC TOPICS

George DuBois, Editor

FCC news and information of interest relating to two-way communications. Send comments and questions to:
George DuBois, 10048 NE Campaign, Portland, OR 97220

The FCC has amended Part 90 to allow the use of digital voice modulation in all the Land Mobile services in which the assign-ment of frequencies is coordinated among users. This will be on a primary, or co-equal, basis with other users. The author-ization of digital or digital-scrambled modulation obligates the licensee to disclose his current encoding information when requested by the Field Operations Bureau, for enforcement purposes (even though the FOB does not have the equipment to decode DVP or any other digital technique). Identification is still required in the unscrambled mode, or by Morse code. Previously, digital voice modulation was only permitted in the Police, Fire and Power radio services.

At the request of the FAA, Part 87 was amended to provide for the operation of Automatic Weather Observation Systems at smaller airports by private entities. These will be similar to the ATIS stations operated by the FAA, providing continuous transmission of routine weather data, altimeter, wind, etc. ATIS stations eliminate the need for a controller to report this routine information repeatedly to pilots. The new Automat-ed reporting systems, though, will provide this essential information at airfields where there is no control tower. Authorization will only be granted to an airport owner or oper-ator, or a party who has entered into an agreement with the owner or operator to provide the service. Only one station will be allowed at a landing area and only at an airport without a full-time tower or FAA Flight Service Station.

TV channel 17 (488-494 mHz) has been reallocated for Fixed Service by Radio Common Carriers in Hawaii. An RCC, Radiocall, Inc., petitioned for the change, since the 72 mHz band can't be used where TV channels 4 or 5 are assigned and the 460 mHz band can't be used for Fixed service in an urban area. The 2100 MHz band could be used but, as Radiocall maintains, not for the long-distance over-water hops needed. This reallocation will allow Common Carriers to use the new frequencies for fixed repeater and control links for inter-island mobile phone and paging

transmitters. The six mHz band will be divided into six channel pairs, each with a bandwidth of 500 kHz. Use of TV channel 17 for similar purpose is permitted along part of the Gulf Coast by both RCC and private users.

The Commission has added a footnote to the table of allocations in the Special Emergency Radio Service urging applicants for the paging frequency 152.0075 mHz to informally coordinate use with adjacent channel users. This was in response to a petition that asked that the frequency either be withdrawn from use or that users be given secondary status in order to prevent interference to RCC licensees on 152.030. The Commission decided that since complaints of interference were few, it would be unwise to preclude operation one the one of only two wide-area paging frequencies available to hospitals in the VHF hi-band.

The FCC is terminating the proposal that would have implemented the use of lotteries to choose licensees in cases where there is more than one qualified applicant for an exclusive frequency. Since the legislation passed by Congress in 1981 that permitted the Commission to institute lotteries required the random selection of "qualified" applicants, this was taken to mean that each applicant would have to be evaluated prior to a lottery. The Commission concluded that the potential savings in costs and delays over the current hearing process would not be realized. They had hoped to be allowed to evaluate applicants after the lottery selection. They are urging Congress to consider introducing new legislation with this in mind. Besides broadcasting, the use of lotteries was considered for common carrier and aircraft unicom frequencies.

The Commission has amended its rules regarding the interconnection of land mobile systems in the 806 to 866 mHz band with the public telephone system. Interconnection is allowed now in the 851 band, but only at the actual control point (an office or place of business) and only under the direct control of the station operator. Below 512 mHz, interconnection is allowed under a mobile units control and operation at a "common point" is allowed, such as an answering service. Under the liberalized rules for the 851 band, interconnection will be allowed on a secondary, non-interference basis on shared frequencies. On channels where a licensee has exclusive use of the frequency, and on all trunked repeaters, auto-patch will be on a primary, or co-equal, basis. There will be no geographic limits on where this will be permitted. (Below 512 mHz, interconnection is not allowed in certain services in the 25 largest urban areas.) There will also be no time limit on autopatch calls. The interconnection may be at any point in the system, such as at the base station or repeater, and may be provided for all licensees on a cost-sharing basis, but in no case for a profit by any party. On SMRs (Specialized Mobile Radio systems) the interconnection may only be contracted by the licensees or users, not the repeater owner.

Among recent proposals is one that would allow handheld transceivers to be counted as regular mobile units for channel loading purposes. (Only a limited number of transmitters are allowed on shared channels in the 470-512 and 851-866 mHz bands, the "channel loading" rules. Also, a certain minimum number of transmitters must be in use in the 851 band before an applicant can have exclusive use of a channel, or apply for another channel.) Presently, two handheld units count as one mobile unit in the Public Safety services in the 470-512 band. In the Industrial services three units count as one mobile. In the 851 band two units count as one in all the services. This is done since applicants with a large number of handhelds could otherwise easily fill up a channel. The Associated Public Safety Communications Officers (APCO) petitioned for the change, stating that

with their present popularity, handheld transceivers generate as much, if not more, radio traffic than their vehicular counterpart and should be counted the same as mobile units for channel loading purposes.

The American Automobile Association has petitioned the Commission to allow use of the 72 to 76 mHz band for Fixed service by licensees in the Auto Emergency Radio Service. This would allow the use of these frequencies for control links for remote transceivers. The FCC has additionally proposed to allow use of the 72 mHz band by licensees in the Manufacturers, Taxicab and Telephone Maintenance Radio Services, these four services being the only ones not presently allowed use of the band for Fixed service.

Another proposal will permit the frequency 122.05 to also be used by air carrier aircraft. (Most frequencies from 121.975 through 123.075 are reserved for private aircraft.) This change will allow the FAA to use the frequency for Enroute Flight Advisory Service, or Flightwatch, in addition to the present frequency, 122.0. Flightwatch service provides direct contact with a meteorologist at an FAA Flight Service Station and heavy utilization in some areas now necessitates the addition of another frequency.
Another part of this same proposal will allow the frequency 122.775 to be used exclusively for ground communications between aircraft and aviation service organizations on airport ramp areas. Most times aircraft will use a unicom frequency to contact FBOs, repair personnel, fuel trucks and the like, and of course, unicom frequencies are supposed to be used for aviation safety advisories at uncontrolled airports. Since many general aviation aircraft dont have radios with 25 kHz channel spacing yet, it is also being proposed to allocate the frequency 122.85 (a multicom frequency) on a secondary, non-interference basis for ramp use.

A Further Notice of Proposed Rulemaking has been issued regarding paging systems at 900 mHz. The original proposal, issued two years ago, would have allocated one mHz (40 channels) to Common Carriers and one mHz for private users between 929 and 932 mHz, with one mHz (930-931) reserved for expansion using advanced technology. The proposal was later modified to place the two allocations adjacent to one another, in case the extra mHz wasn't needed. It could then be reallocated. The two one mHz bands would have also been shared by either group after five years. This Further Notice now proposes allowing local frequency coordinators to select the applicants frequency instead of the Commission assigning them sequentially and drops the establishment of minimum separation between stations. No licensee would have a channel exclusively, but a minimum loading standard of 600 paging units per channel is proposed. Also, no channels would be reserved for particular paging modes (voice, tone, etc.) as was originally conceived.

The FCC is now considering allowing temporary licensing in the General Mobile Radio Service (GMRS) for new users of existing base stations or repeaters, allowing the applicant to begin use immediately while his license is being processed. This would be identical to the temporary licensing permitted in the Business Radio Service. The permit would be valid upon submission of a license application, for a maximum of 180 days, until the license is granted (or denied). The temporary call sign would be the letters WT, followed by the applicants local home or business telephone number.

Finally, the Commission is proposing eliminating the requirement that separate licenses be obtained for speed detection devices in the Police and Local Government Radio Services.

This would reduce the burden on police agencies to file applications and, of course, the burden on the Commission of processing them. The authorization to operate radar units in the 2.5, 10.5 and 24 gHz bands would be included in the regular mobile license of the agencies and no further, specific authorization would be required.

And the FCC has added the Gulf Intracoastal Waterway (GIWW) to the service area eligible for authorization in the Inland Waterways Communications Systems. (This should have gone in the first part of the column with the other Orders, but then if I was a real editor I'd be making the big bucks instead of doing this for nothing.) This Order adds the area from Brownsville, Texas to the Florida Panhandle to the areas authorized the use of the 216 to 220 mHz for the automated Marine communications systems. Stressed in the Order was the possible need to coordinate assignments in the band with Mexico. Also, clarification was made of the original Order in that use of IWCS systems was permissible by vessels on adjacent lakes, bays and canals and not strictly limited to vessels on the Mississippi River system or the GIWW.

FEDERAL GOV'T and ★ MILITARY ★

Send all Federal Government and Military frequencies (including those of military aircraft), radio system details, and related questions to:
Dennis Biagioli, 607 W. Pleasant Ave., Villa Park, IL 60181

Sensitive frequencies will not be published. Coast Guard material must go to the VHF Marine editor.

Hi! I am Denny Biagioli, your new Federal Government / Military Editor. I live in Villa Park, Illinois, in the Chicago west suburban area. I am twenty miles straight west of the Chicago "Loop," and six miles southwest of O'Hare International Airport. I support my radio addiction by working as a teacher -- the Instrumental Music Coordinator for a suburban school district. During the warm months (yes, we have those here, contrary to popular thought after our greatly publicized minus 80° wind-chills) I travel a bit as the head brass instructor of a drum and bugle corps.

I won't bore you with an inventory of my radios. It certainly wouldn't impress many of you. All scanners are Bearcat except one, a Radio Shack. HF monitor is a Panasonic RF-2900. And some Yaesu amateur radio gear fills the gaps on the shelf -- both the wife and I are licensed. Having a mate who shares the hobby certainly makes the justification of new equipment a lot easier.

The column: Ah yes, some big shoes to fill. I would like to thank the former editor, Bob Grove, for all he has done to further our hobby during his tenure as Editor. His "Federal Frequency Directory" serves as the guidebook for many of us, providing answers to many questions and opening up new horizons for some who had never before been interested in monitoring the Government Bands.

Speaking of those who do not monitor Federal frequencies, I'd like to ask one question -- WHY NOT? I have spoken to many members who have said they would love to, but don't know if there is anything to listen to in their area. If you are one of those --and we who now listen were at one time -- then I offer one minor first step suggestion:

LOOK IN THE TELEPHONE DIRECTORY

Listed under "United States Government" you will find your personal guide to what may be available for listening in your home area. I say "may" because not every agency has a radio system. But, you have the address, go look for an antenna. I have found some interesting listening while out "in the boonies" that I would have missed if it weren't for the phone book.

Okay, so you've found a place with an antenna. Maybe it's an Army Corps of Engineer site, or National Park Service, or National Forest, or Air National Guard Base, or a Fish and Wildlife site. Now What? As silly as you might think, you might ask. "Ask who?" you say. Try that lonely Park Ranger who hasn't had anyone to speak with except the bears, or tourists. Or a week-end-warrior. Or, other RCMA member. Or . . . or . . . or . . .!!

You might be surprised how much good information many of us get "from the horse's mouth" because we simply asked "the horse."

Now, I said ASK, don't demand! Be interested in the person as a person, not just a possible source of information. Don't be pushy -- patience is a must. Let him (or her) feel genuine friendship building here, don't be just another loud mouth asking questions. Don't tell the person all you know. Remember, you asked -- now LISTEN. Being a good listener isn't always easy, but it may be profitable to furthering your hobby. So, easy does it. Give 'em a chance to talk about his wife, or her boy friend, or how essential they are to the bureaucracy. Then, after building a rapport with the person, gently slide around to the subject of that interesting radio on their belt, or that unusual antenna atop the roof. Seek, and ye may find. Be a bit pushy and you may be shown (the exit). Be interested, but not too much so. Curiosity is one thing, but don't make the person feel you asked for reasons they would be afraid of. Use your head, not just the mouth, okay. Genuine person-to-person caring usually gets great response.

Plans for the column include listing frequencies for various agencies, master lists. The first of those is from IRAC 1977. If readers will please send confirmations, additions, etc., They will be published later so that anyone who would like can build lists for themselves.

Environmental Protection Agency Frequencies

40.970	CA-NV
41.390	OH (Cincy)
41.470	OH (Cincy)
41.630	USA

164.050	NJ (Leonardo)
164.100	NC
164.250	RI-SC
*164.450	USA-USP-AL-CA-FL-MO-NC-NV-NJ-OH-TX
164.775	RI
164.9875	MO (St. Charles)
165.4125	MO-USA
167.1906	CA (Los Angeles - data)
168.475	UT (Vernal)
169.975	UT (Vernal)
408.000	CO (Boulder) - OH (Cincy) - USA
410.025	MO (St. Louis) - portables
415.450	MO (St. Louis) - portables

Source: June, 1977, printout of IRAC "Unclassified" Frequency Data from U.S. Dept. of Commerce

* Because of the number of listings, it appears that 164.450 is a primary channel nationwide.

GEORGE MOE (WI-004) enjoyed four days in Gatlinburg, TN, during April, and was able to monitor and confirm the following list.

167.150 (R) 166.350 (M)	Great Smokey National Park
171.425 (R)	PO, State of Tennessee & Georgia
172.675 (R)	Interior Dept., Tennessee

Dept. of Energy, Oak Ridge, Tennessee

164.525 (R)	167.025 (R)
164.100	167.125 (R)
164.225 (R)	163.275 Telemetry
164.400 (R)	

Tennessee Valley Authority

40.62	Voice
169.475	Data Tones
169.525	Data Tones

"I was able to talk to a radio tech. at Cherokee, NC, and he confirmed the frequency for "Bureau of Indian Affairs." Their frequency, 165.3375, is simplex and used only for emergency, fire fighting and surveying. No activity was heard."

Thank you, George. Please note the first line I quoted -- the one about learning by talking to a radio technician.

BOB TRIVALOS (WI-026) sends along the following list:

U.S. AIR FORCE -- MITCHELL FIELD
Milwaukee, Wisconsin

440th Combat Support Group (AFRES)

148.0500	Motor Pool
148.1000	Work Load (Civil Engineers)
148.1750	Command Post
150.2000	Aircraft Control Element
163.4625	Security "F-1"
165.1375	Maintenance "F-2"

173.5875 Fire / Crash "F-3"
413.1500 Command Post
413.2000 Prime Beef (Civil Engineers)
413.3000 Prime Beef (Civil Engineers)

128th Air Re-Fueling Group SAC (Wisconsin Air Guard)

163.0125 OPS
163.4875 Security "F-1"
163.5125 Fire / Crash
163.5625 Maintenance "F-2"
163.5875 Maintenance "F-1"
164.9625 Security "F-2"

All above are confirmed. Unconfirmed are:

139.5000 Squad OPS (128th)
148.2450 TCF (sign says "128th," but on 440th property)

Our thanks to Bob for sharing his research. Next time we'll run the UHF flight frequencies for the above two groups.

Bob's contribution brings to mind one way to get a closer look at the inside operations of bases such as this. Nearly every base I've been on, or heard of, has an annual open house. And they aren't always restricted to the day known as "Armed Forces Day." For example, Scott Air Force Base, Illinois, is Saturday, June 19, and Chanute AFB, Illinois, is Saturday, June 26. How can you find out in advance? Write the base Office of Public Affairs. Again, ask. You may be amazed at the courtesy you are treated with. And you may get to see some very interesting displays and demonstrations, plus the opportunity to get a close look (and/or listen ???) to their communications equipment.

That's about it for the first time around. We'll close this column with what will, hopefully, be of assistance to those just beginning monitoring Federal Government / Military communications. This is the VHF Low Band channeling plan for frequencies available to government usage.

Any column needs input from its readers to thrive. This one is no different. It is, after all, your column. Let's have some input -- frequency lists, suggestions, articles on systems (including maps), technical items relating to our subject, whatever. Understand please, there is a time lag before your contributions reach print, but I'll do my best to get your items into the NEWSLETTER. Don't complain if you feel only a few members get into print. That's because most members hesitate to take the time to sit down and put their individual contributions on paper to share with the rest of us. If you wish your name withheld, that's fine -- but please don't send along anything totally anonymously. Write . . . write . . . listen . . . write . . . read . . . ask . . . contribute. I'll be looking for your letter!! Listen, and stay well.

Channeling Plan for Assignments in the Exclusive Government Bands Between 29.89 and 50.00 MHz

This plan shows the frequencies in the exclusive Government bands between 29.89 and 50 MHz to be used for assignments with authorized bandwidths of emission equal to or less than 16 kHz. Such assignments will not be authorized on other frequencies in these bands except a) for the addition of a new station to an existing system that is authorized to use other frequencies and b) for the renewal or modification of existing assignments that are authorized to use other frequencies. By July 1, 1983, Government agencies shall convert to the frequencies shown, those operations in these bands with bandwidths of emission equal to or less than 16 kHz. In these bands, it is recommended that tone coded squelch be given careful consideration as a method to be used to prevent or overcome interference problems that would otherwise detract from fuller utilization of these bands.

29.90								
30.01	32.01	34.01	36.01		40.01	41.01		
.03	.03	.03	.03		.03	.03		
.05	.05	.05	.05		.05	.05		
.07	.07	.07	.07		.07	.07		
.09	.09	.09	.09		.09	.09		
.11	.11	.11	.11		.11	.11		
.13	.13	.13	.13		.13	.13		
.15	.15	.15	.15		.15	.15		
.17	.17	.17	.17		.17	.17		
.19	.19	.19	.19		.19	.19		
.21	.21	.21	.21		.21	.21		
.23	.23	.23	.23		.23	.23		
.25	.25	.25	.25		.25	.25		
.27	.27	.27	.27	38.27	.27	.27		
.29	.29	.29	.29	.29	.29	.29		
.31	.31	.31	.31	.31	.31	.31		
.33	.33	.33	.33	.33	.33	.33		
.35	.35	.35	.35	.35	.35	.35		
.37	.37	.37	.37	.37	.37	.37		
.39	.39	.39	.39	.39	.39	.39		
.41	.41	.41	.41	.41	.41	.41		
.43	.43	.43	.43	.43	.43	.43		
.45	.45	.45	.45	.45	.45	.45		
.47	.47	.47	.47	.47	.47	.47		
.49	.49	.49	.49	.49	49	.49		
.51	.51	.51	.51	.51	.51	.51		
.53	.53	.53	.53	.53	.53	.53		
.55	.55	.55	.55	.55	.55	.55		
	.57	.57	.57	.57	.57	.57		
	.59	.59	.59	.59	.59	.59		
	.61	.61	.61	.61	.61	.61	46.61	49.61
	.63	.63	.63	.63	.63	.63	.63	.63
	.65	.65	.65	.65	.65	.65	.65	.65
	.67	.67	.67	.67	.67	.67	.67	.67
	.69	.69	.69	.69	.69	.69	.69	.69
	.71	.71	.71	.71	.71	.71	.71	.71
	.73	.73	.73	.73	.73	.73	.73	.73
	.75	.75	.75	.75	.75	.75	.75	.75
	.77	.77	.77	.77	.77	.77	.77	.77
	.79	.79	.79	.79	.79	.79	.79	.79
	.81	.81	.81	.81	.81	.81	.81	.81
	.83	.83	.83	.83	.83	.83	.83	.83
	.85	.85	.85	.85	.85	.85	.85	.85
	.87	.87	.87	.87	.87	.87	.87	.87
	.89	.89	.89	.89	.89	.89	.89	.89
	.91	.91	.91	.91	.91	.91	.91	.91
	.93	.93	.93	.93	.93	.93	.93	.93
	.95	.95	.95	.95	.95	.95	.95	.95
	.97	.97	.97	.97	.97	.97	.97	.97
	.99	.99	.99	.99	.99	.99	.99	.99

International

Richard Stein, Editor

This column is for reporting two-way communications frequencies above 30 MHz, radio system details, monitoring experiences, and any other information relating to monitoring in countries other than the United States and Canada. Send to: Richard Stein, 456 Barrymore Place, North Brunswick, NJ 08902.

We'll continue with additional Mexican listings this month. The following comes from an RCMA member who has spent considerable time living and travelling in that country. It covers the city of Guadalajara, in the State of Jalisco, and the surrounding sections. It is valid thru the last revision dated 14Sept80.

40.39 R	Flow and pressure reading approx. every hour. Probably SARH, Secretaria de Agricultura y Recursos Hidraúlicos. {THIS IS A MOST INTERESTING STATION. IT HAS BEEN RECEIVED HERE ON THE EAST COAST VIA SKIP AND WAS REPORTED BY GEORGE DU BOIS,OR-001, AS BEING A SOURCE OF INTERFERENCE TO RADIO COMMS. AT MT. ST. HELENS. ALSO SEE PAGE 31 OF THE AUG 81 NEWSLETTER FOR INFO ON MOUNT ST. HELENS' RED ZONE WARNING SYSTEM.
49.02 R	Similar to 40.39 R
146.46	Amateur simplex channel, used by youngsters who do not ID
146.76 R	Amateur repeater output, input locally 146.16. At times, several repeaters are linked with coverage to León from Guadalajara, to Mexico, DF, to Morelia and Puebla; at these times multiple squelch tails are given, indicating that as many as three repeaters are linked. Further technical data unknown. All stations ID with amateur calls. {UNLIKE ACAPULCO} Audio poor.
146.88 R	Guadalajara's own repeater, input standard 146.28. Located on west part of town atop tall building at Minerva Circle. All stations ID with amateur calls. Good audio.
146.94 R	Amateur repeater located in Tequilla, Jalisco, and difficult to access from Guadalajara without directional antennas. Input standard 146.34, audio quality fair.
148.030	Simplex, B-M, business type activity. Also has tone and voice paging system on this frequency, apparently for the use of this particular business.
148.100	Simplex, B-M, unknown business type activity
148.350	Simplex, B-B, hospital communications for IMSS(Instituto Mexicano de Seguro Social)
148.525	B-M, CFE(Comisión Federal de Electricidad),"AREA",probably central office, also with tone and voice page
150.100	Simplex, B-M, probably construction company
151.775 R	B-B, hospital communications for IMSS, outlying clinics and hospitals. Also used as a simplex frequency.

152.035	Simplex tone and voice paging system
152.150	Same as 152.035
152.210	Same as 152.035
152.725	Simplex, B-M, repair units for Aqua Potable system
152.825	Simplex, B-M, Zapopan Police F-1, dispatches mobiles and receives reports, all in complex number code.
152.870	Simplex, broadcast relay to transmitter site for AM station
153.650	Simplex, B-M, M-M, police type activity with number codes, may be sensitive frequency. Weak signals indicate low power of some units and/or HTs.
154.000	Simplex, B-M, Guadalajara police F-1, dispatches mobiles and receives reports all in complex number codes.
154.100	Simplex, B-M, M-M, believed to be bank security service. May be sensitive frequency. Number codes, low power, very short transmissions.
154.400	Simplex, B-M, M-M, unknown police activity. May be sensitive frequency. Number codes, short transmissions.
154.700	Simplex, B-B, B-M, believed to be Jalisco Transito, the state traffic police. Number codes.
154.730 R	B-M, believed to be Federal Highway Police. Number codes.
155.200	Simplex, B-M, F-1 Jalisco Transito. Number codes.
155.375	Simplex, B-M, police dispatch for unknown area/function. Number codes.
155.500	Simplex, B-M, police dispatch for unknown area/function. Number codes.
155.675	Simplex, B-M, police dispatch for unknown area/function. Number codes.
157.275	B-M, trucking company
157.430	Tone and voice paging service
157.450	Simplex, B-M, police dispatch for unknown area/function. Number codes.
157.750	Simplex, B-M, construction company
157.950	Simplex, B-M, construction company
157.825 R	B-B, B-M, CFE, the power company, albeit a Federal agency. Input 158.900, readings hourly to a central station.
157.855 R	B-B, B-M, CFE. Input 158.855
158.300	B-M, B-B, local simplex frequency for CFE.

This is the first section of the list. I will continue with the second half next month. Coming up soon are the articles I've been

promising on the Russian radio equipment. One of the articles is translated and work is continuing on the second. To the member who supplied the Mexican information-רבה תודה -ווינלי- and until next month- שלום

LOW BAND SKIP

MIKE BRITT EDITOR

Send reports of distant stations received on the 30-50 MHz Band, as well as: information; comments; suggestions; question; and any items of interest regarding Low Band Dxing to:
Mike Britt, 14631 Yorba Street, Tustin, CA 926380.

Greetings!

In this, my second Low Band Skip column to appear in the RCMA newsletter, I shall highlight, as I did last month, some items from my personal files. I have quite a bit about foreign skip this month, so I have decided to postpone, until next month, the information about fire departments on 33.90MHz. This is information which I have compiled over the last several years from listening to skip transmissions. As I mentioned last month, I am considering regularly featuring in this column, a focus on specific low band frequencies. By listing ID's and other identifing information, I hope to make it easier for all to identify skips. I am concentrating on information which you won't find in any "frequency directory", but not as in depth as a perspective of each system (that is for the Public Saftey columns). If this sounds like a good idea to you, then perhaps you would like to contribute to future outlines of low band frequencies. Remember, it must be info. you have obtained via skip reception. More about this in the August column, along with the 33.90 info...("770 to cheif 15: contact the Fire Board"..."All South Berkeley monitors"..."9-X-1"..."Station N, your signal 50-acknowleged"..."2-Sam-91, inservice;returning"...).

DON'T CRY FOR ME ARGENTINA...

Last month I listed several frequencies on which I have received foreign skip. Included in this list were the frequencies of 32.68 and 32.96, on which I regularly have heard Spanish medical paging transmissions. I had guessed that these signals were coming from South America, and this has proven to be quite true. No sooner than I had mailed off my column for the June newsletter, than I recieved the May issue, which contained the information which helped me prove that I had been hearing hospital paging from Argentina!

The big clue came from the International column. The editor, Mr. Stein, in his May '82 column made mention of low band foreign skip, stating: "...active are the hospital pagers in Argentina on a number of freqs, including 32.68 and 32.82. The paging tones and the female with the distinctive Argentinian Spanish accent make this an easy one to ID." Well, seeing as I am unfamiliar with the various Spanish accents that exist, I had not found the identification of these skip signals quite so easy as Mr. Stein had. It was, however, quite obvious that what he had described was almost, if not, identical to what I was hearing. Here I should note that he resides in New Jersey, and I in California. Therefore, a south to north path of signal travel would have to be the common factor for each of us to be receiving the same signals.

I had not previously checked to see if the place names I had heard mentioned in these transmissions were cities located in Argentina. I had honestly not considered that such predictable skips were traveling so great a distance (between 11,000 and 12,500 miles). When I checked my notes against a map of Argentina, I

found that the locations I had heard mentioned were indeed in Argentina. These included the cities of Santa Isabel, Santa Maria, and most noteably, Buenos Aires.

I had not checked the frequency of 32.82 before and had not received skip on that frequency, as mentioned by Mr. Stein. The very next time that the skip was in strong, I programmed 32.82 into the scanner, and, as expected, received a pager signal and Spanish voice transmission. The signals on 32.82, 32.68, and 32.96 are obviously identical in nature, and I would expect that the transmitting stations are all operated by the government of Argentina.

Two final notes about this propagation from the lower half of the continent are that the signals are both strong and regular, and additionally, the skips have been received all across North America. I would have to assume that many of these broadcasts come from some downright powerful transmitters to produce signals which are so consistantly strong. I have picked up these skips on my Bearcat 100 hand-held while standing in my front yard. I consider this quite a feat, since Betty's state-of-the-art hand held even has difficulty picking up the local highway patrol when I'm standing on a nearby hillside. (Speaking of the BC-100, what's the use of a carring case when you have pull the scanner out of the darn thing everytime you want to change a function!).

I was skimming through some of my back-issues of the RCMA newsletter, when an entry in the Low Band Skip column of January, 1980 caught my eye. Terry (IN-003) reported that on 7/18/80, at 09:40 CDT, he received a pager signal and Spanish language transmission on 32.82! So there you have it - skip from South America received on the east coast, west coast, and in the Midwest...over the past three years at least.

How about the rest of you out there? Certainly many more have heard these signals. The common charactoristics include the paging tones which proceed each voice transmission, and the fact that each message is immediately repeated (some of the more urgent messages are repeated several times). Common terms and words heard include: "llama" (prounounced: YAAMAH) or a form of the verb "llamar", which means to call (telephone); "médico" (MEHDHEEKO), a doctor, or literally, a medic; "hospital" (OASPEETAHL); and "clinica" (CLEENEEKAH), meaning a medical clinic.

So, now that this mystery has been solved, can anyone come foreward with the location(s) of origin of those spanish pagers (business type) which I hear on several 35MHz frequencies? (How about this clue: L.B.S. column of Sept. 1980, Dan (PA-014) reported receiving Spanish broadcast preceeded by paging tone on 35.28 MHz!). Ideas?

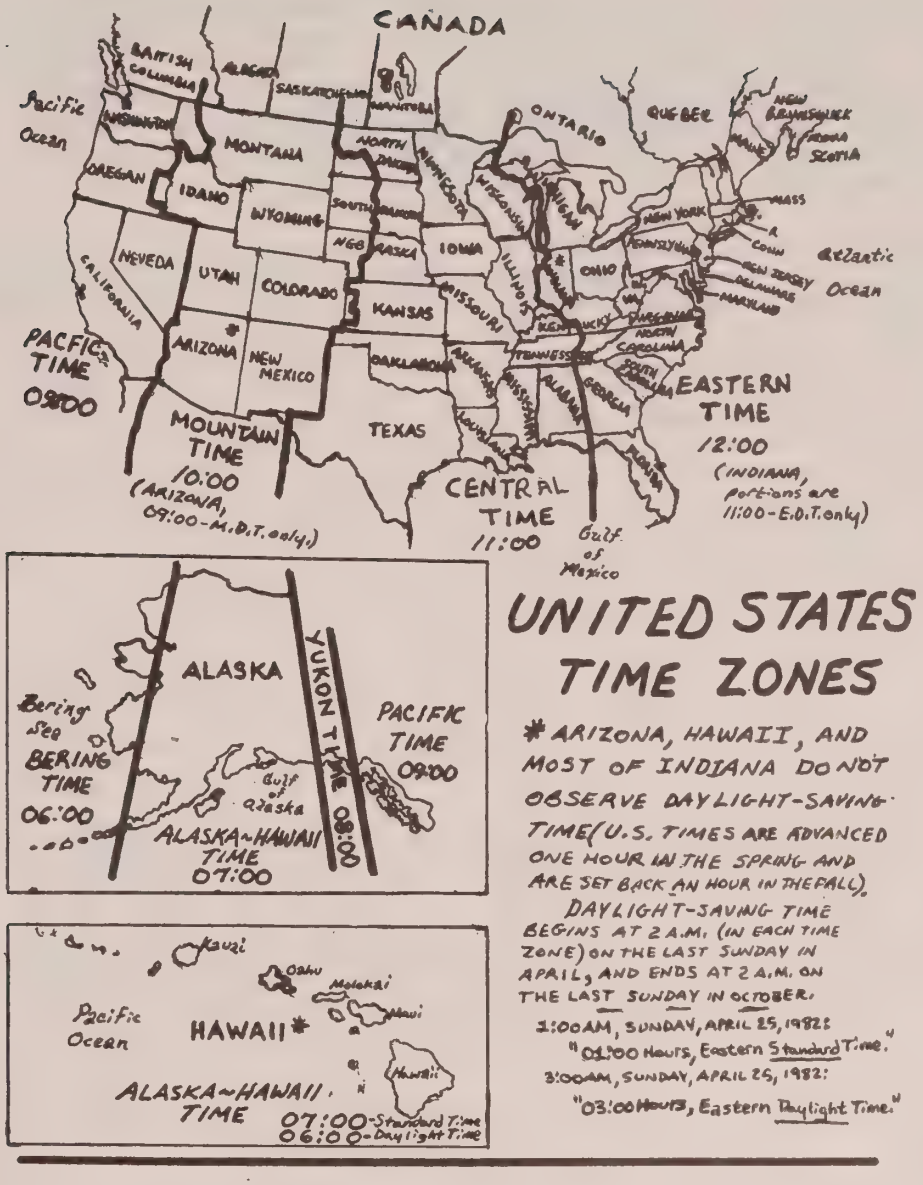
UNITED STATES TIME ZONES

On the next page, or at least somwhere nearby, you should see a map I have made up which shows the boundries of the U.S. time zones. Since public service radio stations in the U.S.A. regularly give the time over the air, the first step in IDing a skip is to determine what time zone it is originating from. For most of us, North American time differences are common knowledge, but I find that I need to check the map every so often because of "boarderlines" and exceptions to the rules. The map here is provided for quick reference. Take note of Daylight Saving Time and those states which do not observe it.

MORE FOREIGN SKIP

Two frequencies which are active as I type this in late April, which I didn't include in last month's list of foreign skips, are 33.14 and 34.30 MHz. For those who have scanners with a 10.8 IF, the image of the latter frequency appears on 33.35. On both 33.14 and 34.30 I have heard Spanish - conversational rather than the paging type messages of 32 MHz.

I can safely assume that there is a base with several mobiles, or several different bases on 33.14. Of the voices I hear conversing, the signal strengths



UNITED STATES TIME ZONES

*ARIZONA, HAWAII, AND MOST OF INDIANA DO NOT OBSERVE DAYLIGHT-SAVING TIME (U.S. TIMES ARE ADVANCED ONE HOUR IN THE SPRING AND ARE SET BACK AN HOUR IN THE FALL).

DAYLIGHT-SAVING TIME BEGINS AT 2 A.M. (IN EACH TIME ZONE) ON THE LAST SUNDAY IN APRIL, AND ENDS AT 2 A.M. ON THE LAST SUNDAY IN OCTOBER.

1:00 AM, SUNDAY, APRIL 25, 1982:
"01:00 Hours, Eastern Standard Time."
3:00 AM, SUNDAY, APRIL 25, 1982:
"03:00 Hours, Eastern Daylight Time."

seem to vary quite a bit. I am able to detect a distinct accent, but I do not know what dialect of Spanish it is. It is not like the Argentinians, and, to me it sounds almost European. I don't know how else to describe it, except to say that when I first heard this skip, I thought it was French - until I realized the words being spoken were Spanish.

Still on the subject of foreign skip, , I have discovered something that has me rather puzzled...a signal on 33.675. This is not an image, for I have checked and rechecked for this possibility and found nothing on the appropriate frequencies. I discovered this signal while listening to 33.68, on which it bleeds through, but is apparently not actually being broadcast on. Although the transmissions seem to be best on 33.675, the quality of the signal is still so poor that I must have the volume turned up to the maximum to even hear what is being spoken. The skip signals have been in Spanish, however I have heard English being spoken as well. My guess is that this is an AM signal, and my FM receiver will not properly pick it up. These are conversational transmissions, and are definitely not fire traffic from 33.68. Perhaps someone else can better explain this. Any ideas?

In the February, 1982 issue of Firehouse magazine, an article entitled "Skipping Coast-to-Coast", told of a New York fire department's experience with receiving skip on 46.32. In light of that article, a reader from Lancaster, N.Y., in the April, 1982 issue, wrote telling of a foreign skip on 46.50. It seems a foreign exchange student from Argentina was visiting the home of a firefighter when one of these transmissions came over the scanner. The student recognized the language as his native tounge, and was able to identify Buenos Aires as the origin of the broadcast.

10-8 AND ALOHA

Also in the April issue of Firehouse, a Newberg, Oregon fireman wrote saying that his department, and others nearby on the frequency of 46.10, had received skip from Hawaii on several occasions. I'll take this opportunity to tell you that I have also heard Hawaii on 46.10 (this happens to be the dispatch freq. for "Verdugo Fire", which is a coordinated fire system for the cities of Burbank, Glendale, and Pasadena, all located in Los Angeles County).

On 10/30/81, I had been listening to very strong, clear skip from the East in the 46MHz band. With Eastern Standard Time on my mind, I was quite startled to hear a time given which was two hours earlier than here in California. At 11:34 PST, I recorded the following dispacth:

"Code 2 alarm in Hakalau: patient with heart problems.
At the Hakalau intersection, you make a left turn. It's
the green house just before the baseball park. WTS 55, 9:34."

Hakalau is located on the east side of the island of Hawaii. It is on the coast, north of Hilo. Receiving this skip on the west coast of North America is not that surprizing, when you consider that Hawaii is some 2,600 miles from my location in Southern California - the same distance as many of the skips I have received from the East. I am not familiar with the fire protection and medical services in Hawaii, but the call sign of the department on 46.10 (WTS 55) would indicate that it is a state or federal agency. In this particular case it may be the state forestry, or equivalent, which protects the rural areas of the island.

LET'S HERE FROM YOU!

If you haven't realized it yet, I can gab for several pages about almost anything to do with skip. However, it would help me if all of you would send in some things for me to discuss in the future. Even if you have some of those old reception reports laying around, you can send them in too. I'll talk about what it is I specifically want from members in more depth next month. For now, my request is, that, if you write, please follow the guidelines which are stated on the inside of the front cover of the newsletter. It helps if you type your correspondence, but if you can't, please write legibley. Print if you have too. If I can't read it...then I won't read it! It's as simple as that. If you desire to have a reply, I will be happy to accomodate you...but only if you enclose a SASE. Be patient though, I can only do so much at once. Remember too about the newsletter deadlines - every thing you read here is about two months old.

Speaking of the timeliness of the newsletter, the reason there is no member input this month in this column, is due to the fact that, as I prepare this column, the June '82 newsletter which contains my debut column has not even been put in the mail yet. Deadlines require that the material be sent two months prior to the date of the issue in which that material will appear. This allows enough time for the newsletter to be put together and mailed out a month in advance of the cover date. All this, then explains why I am typing this in late April to meet the May deadline for the July issue which will be mailed in June. Are you confused yet?

UNTIL NEXT MONTH...

It will suffice to say I have lots in store for the August newsletter. Before I sign off, I have a special request to make of those RCMA members who are outside the continental United States. If you would be so kind as to write and tell about what skip you hear/have heard in your location, I'm sure it would be most interesting to the rest of the members. I, for one, am curious to learn what our international members receive in the way of propagation above 30MHz. (Perhaps those in other countries have received U.S. broadcasts via skip).

73's until next month,

Mike

MONITORING & THE LAW

Eric P. Gaskell, Editor

Send all articles, references, copies of monitoring laws and questions pertaining to the legal aspects of monitor radio listening to:
Eric P. Gaskell, 1925 16th Ave., Apt. 210, Vero Beach, FL 32960.

Well here it is another month and my second column on Monitoring and the Law.This month I want to talk about the scanner laws in the state of Kentucky.

Statute number 453.570 in the State of Kentucky relates to the poessession of a police radio.
A radio capable of receiving police radio transmissions, but not capable of sending or transmitting messages may be possessed by any individual at his place of residence, business.

But it shall be unlawfull to use such a radio to facilitate any criminal activity or to apprehension by a law enforcement officer.

That is all for this month.

Public Safety

This column is for reporting Public Safety and Special Emergency frequency information, radio system details, radio codes, dispatch areas, unit numbering systems, etc. for police; sheriff, fire, forestry (except USFS), fish and game, highway patrol, state police, prisons, prisoner work camps, local government, highway & street maintenance, port authority/bridge maintenance, animal control, ambulances, paramedics, hospitals, life guards, ski patrol, search & rescue, flood control, civil defense and disaster organizations. Input and questions for this column must be sent to the proper regional Public Safety editor listed below.

PUBLIC SAFETY - CALIFORNIA

Send Public Safety and Special Emergency frequencies, radio system details and questions to:

Public Safety, California, P.O. Box 3962, Santa Fe Springs, CA 90670-1962

WELCOME TO THE JULY 1982 ISSUE OF RCMA PUBLIC SAFETY - CALIFORNIA

From MILTON (CA-SD-025): Another City of San Diego Medevac Paramedic not stationed at the Fire Station; Unit 38, 9373 Activity Rd.

From RENÉ (CA-SC-018): REF. the 72-75mhz CHP control freqs. listed in the May column, only one side of the conversation is heard. Example - 74.14 from Monterey is a down link control which repeats mobiles to Monterey dispatch. An uplink control freq. such as 75.82 would be used to transmit to the primary on 42.( )mhz. The 72-75mhz band is also used by motor carriers such as KMV59, Garden City Transportation in San Jose at 73.50 for dispatch purposes.
On René's favorite subject, scanners and modifications to them, since modifications are so simple, why doesn't the manufacturer incorporate them in the original scanner and use them as selling points for his brand of scanners, or, are our amateur technicians that much more intelligent than scanner company engineers? Boy, now we're in for some feedback.

Los Angeles County Sheriff 470 Radio System Update.

This system is used by detectives and by patrol units using handheld radios as a car to car system. Both repeat and simplex modes used.

F1 470.6875 Countywide Patrol Tactical
F2 470.9375 Countywide Detective Operations
F3 470.7375 LA Basin Detective Operations
F4 470.7625 Countywide Car to Car Custody Division units
F5 470.8375 Southwest Area
Malibu #10 Lynwood #25
Lennox #3 Carson #16
W. Hollywood #9 Lomita #17
Firestone #1
F6 470.8625 East Area
Crescenta #12 Temple #5
Altadena #7 East L.A. #2
F7 470.8875 South Co.
Lakewood #13
F8 470.9125 East Area
San Dimas #8 Pico Rivera #15
Industry #14 Norwalk #4
F9 470.7875 Countywide Sheriff's Radio Center access
F10 470.8125 North Area
Santa Clarita Valley #6
Antelope Valley #11

From DAN (CA-LA-359); Some answers to freqs. asked about in June col. 39.56 LAPD Was used by the Big Chief (Mobile #113) before the UHF lo freqs. were obtained. Some routine traffic and phonepatching took place. Rarely used now. There is a possibility Hollywood stn. dispatch (158.91) may be used in a simplex mode after Hollyweird goes to ROVER. 37.36 LASO Was the old LA CO. District Attorney freq. 39.16, 39.28. 39.92 These were supplemental to freqs. "Adam" 39.36 and "David" 39.24 although the type of usage is unknown. The Aerobureau (Helicopter/Aircraft support) probably uses these freqs. during special operations.

JERRY (CA-SD-047) responded to the inquiry in the June column ref. 158.91 for San Diego PD and says that all he receives is LAPD.

Knott's Berry Farm Security Station "K" 151.655 KNL654

Beat 1	Front End, ticket booths	10 series
2	Ghost Town	20 series
3	Fiesta Village	30 series
4	N/end Roaring 20's	40 series
5	S/end Roaring 20's	50 series

05	Security Manager	Graveyard Watch 1
08	Lieutenant	Day Watch 2
09	Sergeant	Swing Watch 3

Example; Unit 121 is watch 1-. Ghost Town Area 21.

151.625	General Maint.
154.57	Rides Maint.
464.55	Entertainment
464.825	Marketing
158.46	Paging

Movieland Wax Museum Security: 151.625

Disneyland Security: 154.60
Maint. 154.57
Paging 154.625
Hotel 464.575
Rides 42.98

Anaheim Stadium and Convention Center Security: 463.95.

Lion Country Safari: 464.875.

San Diego Zoo Security: 151.895.

Sea World Security: 154.515

Wild Animal Park (San Diego): 453.20.

WILLIAM (CA-LA-464) has corrections to the May 1982 column.

West Covina Fire Dept. uses 506.5125 for primary dispatch and can use 154.28, mutual aid "white".

Azusa Fire Dept. does not have a Medic 51 - Aids Ambulance Service provides paramedic service for the city of Azusa. Their call sign on 154.07 is Medic 7, back up unit is Medic 8.

Desert Hot Springs P.D. uses the local govt. freq. 155.745.

****

ROY (CA-OR-???) is looking for the freq. that is used by Newport/ Fashion Island Security. Although 461.90 is used by Irvine Company which provides security for the Mall, it seems that an auxiliary frequency is used specifically for the Mall Security.

****

From Milt (CA-SD-025):

San Diego County Sheriff's Department

The Sheriff's new communications center and radio system went "on-line" at 2300 hours on Monday, April 19, 1982. The new center replaces the previous facility in downtown San Diego. The new center is located in Building 12 of the County Operations Center on Kearny Mesa. The center has 13 telephone answering positions and five dispatch consoles. The radio and telephone equipment cost $2.4 million, remodeling cost $349,000, and equipment cost $20,000. The center is already designed and equipped to be the 911 telephone answering point for the unincorporated area and contract cities beginning in June or July. The radio equipment is Motorola.

The new radio frequencies are:

Channel		Mobile	Call Sign	Base/Repeater	Channel #
Car-to-Car		458.725	KNC404	453.725	1
Area 2	North Coast	458.750	KNC415	453.750	2
Area 3	North Inland	458.925	KNC417	453.925	3
Area 4/7	East, Desert	458.500	KNC416	453.500	4
Area 5	South	458.950	KNC412	453.950	5
Inquiry		458.575	KNC406	453.575	7
Tactical North		458.425	KNC401	453.425	9
Tactical South		458.825	KNC405	453.825	10
Administrative		458.400	KNC413	453.400	6
Emergency		458.100	KNC402	453.100	8
"Talk-around" North		453.425	KA88384	453.425	11
"Talk-around" South		453.825	KA88384	453.825	12
Detective		458.250		453.250	-

See page 65 for drawing of proposed transmitter/receiver setup (some of the detailed elements of thise scheme have not yet been completed).
Additionally, the "old" radio equipment remains in the patrol and other vehicles; its future use is unknown.

The old frequencies are:

North Coast (Green)	153.875
North Inland (Orange)	154.055 B 154.965 M
East/Desert	45.700 B 45.780 M
South	45.900 B 45.380 M
Detectives (White)	155.025
Emergency (Blue)	153.995

Others contributing to this article were:
JERRY (CA-SD-047); JEFF (CA-OR-012); and STEVE (CA-SD-011).

The new sophisticated consoles will be able to automatically decide to accept the broadcast from the repeater that gives the best signal, which should improve the quality of each broadcast. Dispatchers will now be able to readily patch calls not only between different sheriff's

CHANNEL	Lake San Marcos Pk	Red Mtn	Palomar Mtn	North Pk	Monument Pk	Los Pinos Mtn	White Star	Lyons Pk	Cowles Mtn	Mt. Woodson	Mt. Soladad
Car-to-Car			B	B		B					
Area 2	MR									SR	SR
Area 3	MR	MR	MR								SR
Area 4/7			MR	MR	MR	MR	MR	MR			
Area 5								MR	MR		
Inquiry	MR		MR	MR	MR	MR		MR			
Tactical North	MR		MR								
Tactical South				MR	MR	MR		MR			
Administrative			MR	MR		MR			MR		
Emergency			MR	MR		MR			MR		

B - Base Station MR - Mobile Repeater SR - Satellite Receiver

PROPOSED TRANSMITTER/RECEIVER SETUP

cars, but between sheriff's deputies and local police units, fire trucks, ambulances or virtually anyone else a deputy would need to talk to by radio. Other monitors enable the dispatcher to have the telephone number of the caller automatically recorded. Dispatchers handle approx. 1,500 telephone calls per day and numerous radio dispatches.

****

From DAVID (CA-SF-025):

MARIN COUNTY LAW ENFORCEMENT: CODES, FREQUENCIES, AND ORGANIZATION.

Marin County, located just north of the Golden Gate Bridge, has a population of 220,000 on 500 sq. m. There are 11 cities and numerous unincorporated areas. This paper discusses: (1) Communications; (2) Frequencies; and (3) Codes.

COMMUNICATIONS:

Though Marin County is very wealthy, very little money is spent on law enforcement on a per capita basis. The central communications area is the County Communications Office located in the Hall of Justice, San Rafael. This office is run by the Communications Division of the County Sheriff. The 1979-80 budget was $820,000 for a staff of 27. The division is responsible for all city, district, county communication facilities and maintenance thereof. In an emergency, such the great flood earlier this year, the Marin Emergency Services Office will use the com center for broadcasting data to the various cities and towns.

Each city has a base station (I will list exceptions), but frequencies are shared between several departments. Some cities, like Fairfax (which almost lost its dept last year due to funding problems) hires part time dispatchers for $3.75 per hr. Most Marin County Cities are small, have small PDs, and do not have very advanced equipment.

The Marin County Com Center has dispatching contracts currently for: Tiburon, Novator, Alto Richardson Bay, and San Anselmo Fire Depts.; Ross Police, Mosquito Abatement District, and Marin Community College Police. The Com Center also dispatches for the Sheriff.

FREQUENCIES:
MARIN SHERIFF PRIMARY: 39.24. The other Police Call freqs: 39.28, 39.48, and 39.36 appear to be substation freqs. In addition to the Hall of Justice station, there are subs at Kentfield Fire Station, Pt. Reyes Station, and Marin City.
SAN RAFAEL POLICE PRIMARY IS 39.16. Their office is at 1400-5th ST. (Modern). They use Ch.4 39.48 as a secondary frequency, but cannot pick up in SF. More than 95% of transmissions is on 39.16.
TWIN CITIES POLICE: After Prop. 13 Corte Madera and Larskpur PDs merged due to budgetary problems. As a result, TCPD is the only city in the county with two police stations (342 Tamalpais in Corte Madera and 250 Doherty Dr. in Larkspur). They broadcast on 39.52. However, this frequency is also shared by Mill Valley Police. And, the county can talk to local PDs about various things. (Eg: Recen tly County Com asked MVPD on 39.52 to dispatch a car for a certain call because another city's units were 10-6(unavailable).
SAUSALITO PD: They have a private frequency 39.64 (Lucky.) This freq also is sometimes used for FD dispatch and pagers.
TIBURON PD: They too have a private frequency 39.72.
(The others, Ross Valley Traffic Service, San Anselmo, Belvedere (may use 39.72), Ross PD, Mill Valley, Novato (39.98) use either 39.44 or 39.52.
MARIN CHP: Located on Paradise Dr. in Corte Madera, is on 42.08 (NICE RECEPTION IN S.F.).

CODES:
Mostly English: There is 459 Burglary, 415 Fight (in SF is 418). Other codes used are 10-19 Meet with; 10-21 telephone, 10-50 Take Report, Code 6 M or F (traffic tickets, misdeamore or felony), 10-6 busy.
RADIO IDs: Number, Letter, Number system. The first number is the agency. (Sheriff 1; San Rafael 3; Sausalito 10; Fairfax 5; Tiburon 12). Letter is type of unit: Patrol is L; Sergeant X; Captain K(?); Chief A; Traffic T; Cadet C. The last number is thenumber for that unit (usually 2 digits).
EXAMPLE: 3L24 (A San Rafael Patrol Unit); X120 (Marin Sheriff).

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From RON (CA-VE-013) late additions:

Ventura CHP-Comm Center (#31) has begun using the portable extenders. It is repeating 42.40, 42.16 (155.445 link channel) including car to car traffic. 154.695 is the control point frequency that operates the Laguna Peak/South Coast repeater (Malibu area).

Attn. Ventura Police Dept. monitors (155.31mhz):

X-RAY units-Directed Patrol (Special Enforcement)
ZEBRA units-Zone Cars (Usually manned by Corporals)
Zone 1 - Beats 1 & 2 (West)
Zone 2 - Beats 3 & 4 (Central)
Zone 3 - Beats 5 & 6 (East)

****

From DAVID (CA-SF-025) late additions:

Update on Marin Co., 9 = Mill Valley PD, 20 = Twin Cities PD.

Freq. corrections; 39.52 - Base is Control 2 (county) used as service channel by local PD's such as Twin Cities (file checks, etc.) this channel is F2 for all Marin Cities. 39.28 - is F1 for Twin Citeis.
39.44 - Ross Fairvax, San Anselmo PD's, Ross Valley Traffic Service.
39.72 - Tiburon, Belvedere, and Mill Valley PD's.
39.82 - Novato PD.

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From JERRY (CA-OR-002): The proposed 800 mhz radio system for Orange County Fire depts. may take as long as 10 years to implement.

****

From ERIC (CA-LA-045): Los Angeles County Sheriff low band radio system is now more enjoyable to listen to due to the beep tone change which is less obnoxious. The beep tone allows the deputies to know when the channel is busy since they cannot hear other units when they transmit.

****

From RON (CA-VE-013):

Here are some items of news interest from the Ventura County area. Most of this info is additions and corrections to data previously published. Happy Monitoring !!!

A) Ventura County Fire monitors should listen for mutual aid responses with the following units on 154.010 MHz.
Camarillo State Hospital Engines 22 and 79.
Port Hueneme C.B.C. Base Engine 3-5
Rocketdyne Engine 317
Anyone know what frequency Poiny Mugu NAS fire operates on ?

Ventura County Fire has completed the relocation of fire station number 26. The new station is at Telegraph and Olive, Saticoy. The City of Ventura is looking at a proposal to possibly occupy the old station, located on Darling Rd. in saticoy.
Construction is almost complete on a new county station in the Mission Oaks area of Camarillo. It is located at Santa Rosa and Woodcreek and will be Station 52.
Plans for 1982 call for a new station to be constructed in the Somis area, north of Camarillo, if budget cuts allow it.

B) The Ventura County Sheriffs Dept. is currently operating five mountain top transmitters. They are: 159.21mhz
KMG 405 - Red Mtn. (Ventura)
KMH 693 - South Mtn. (Santa Paula)
KBQ 230 - Rocketdyne (Simi)
KZK 304 - Laguna Peak (South Coast)
KLY 941 - Thousand Oaks

Here is unit numbering for non-patrol units:

2F - Crime Lab
2P - Staff Medical
2S - Personnel-Training
5A - Camarillo Detectives
5B - West County Detectives
5H - Major Crimes
5I - Intelligence
5N - East Valley Narcotics
5S - East Valley Detectives
5T - East Valley Detectives
5V - West County Narcotics
5Z - Bomb Squad
5W - Fugitive Warrant Detail
6B - Honor Farm Deputies
6L - Custody Watch Commander
6R - Main Jail Deputies
6S - Main Jail Shift Sgt.
6T - Inmate Movement Detail
6AL- Custody Admin. Lieutenant
6AS- Custody Admin. Sgt.
7A - Civil Detail
7B - Superior Court
7C - Municipal Court
7F- Bureau of Identification
7R - Civil-Support/Levy Detail
7W - Warrant Detail

Law enforcement monitors should also try 156.015 MHz. This is the countywide car to car frequency. The channel varies from agency to agency. (Ventura PD 5, Oxnard PD 4, Sheriff 9, Simi PD 7)

Other misc. users of the Sheriffs frequency 159.210 are:

"DA--"	District Attorney Investigators
"MH-3"	Mental Health Dept. Mobile Emergency Crisis Team
"Harbor Patrol"	Ventura Co. Channel Islands Harbor
"Airport One"	County Airport Security
"Parks--"	County Park Rangers
"728"	County Coroner
"719"	Oxnard FBI

C) Ventura County Local Gov't. Main
158.745 input
153.815 repeater

KHQ 28	Agriculture Dept.
KRX 44	Regional Sanitation-Simi
WDQ 402	Regional Sanitation-Santa Clara
WDD 580	Regional Sanitation-Oxnard
KRX 45	Mental Health Dept.
KRX 43	Lab Control
WAU679	Maintenance dispatch - Control Three
??? ???	Control One (UNKNOWN)

D) Ventura County Local Gov'T. Simplex
155.145

KKD 491	Oxnard Community College Police
KSZ 932	Ventura Community College Police
WXP 492	Station 7-Ventura S.O. Honor Farm
KTX 660	Oxnard Airport
WRU 796	Camarillo Airport
WZX 526	Harbor Patrol

E) Ventura Local Gov't. Secondary
158.775 input
153.785 repeater

WAU 733	Control 7 Animal Regulation
KE6234	County Park Rangers

F) Ventura County Public Works
156.240 input
151.025 repeater (call signs unknown) Mobiles KD 6185

"Control Two"	County Roads
"Garage One"	Fleet Maintenance
"Radio Service"	County Communications

INYO NATIONAL FOREST

FRED (NM-005)

168.125R

Supervisor's Office

6-1	Forest Supervisor	6-3-1	Wildlife Biologist
6-2	Fire Mgmt. Officer	6-3-2	Hydologist
6-2-1	Radio Tech	6-4	Forest Engineer
6-2-2	Forest Dispatcher	6-4-1	Asst. Forest Engineer
6-2-3	Asst. Dispatcher	6-4-2	Asst. Forest Engineer
6-2-4	Asst. Dispatcher	6-6	Recreation Officer
6-3	Resource Staff Officer	6-8	Admin. Officer
		6-8-1	Contracting Officer

Mono Lake

1-1	District Ranger
1-2	Fire Mgmt. Officer
1-2-1	Asst. Fire Mgmt. Off.
1-2-2	F.P.A.
Pat.1-1	Lee Vining
Pat.1-2	June Lake
Pat.1-3	Crater
Eng.1-1	Lee Vining
Eng.1-2	White King
Water T.1	White King
1-3	Timber Mgmt. Officer
1-3-1	Sale Prep. Officer
1-3-2	Small Sale Officer
1-3-3	Culturist
1-3-4	Timber Tech.
1-3-5	Tree Cop
1-3-6	T.S.I. Foreman
1-4	Resource Officer
1-4-1	Asst. Resource Officer
1-4-2	Range and Res. Crew
1-5	Visitor Info. Services
1-6	Recreation Officer
1-6-1	Recreation Tech.
1-6-2	Recreation Specialist
1-6-3	Lee Vining Unit Manager
1-6-4	June Lake Unit Manager
1-6-5	Maintenance
1-7	Wildlife Biologist
1-7-1	Asst. Wildlife Biologist
1-7-2	Wilderness Survey Crew
1-8	Lands Officer
1-9	Winter Sports Spec.
1-9-1	Winter Sports Asst.
1-0-1	Hoover Wilderness Ranger
1-0-2	Minarets Wilderness Ranger

Mammoth Lakes

2-1	District Ranger
2-2	District Fire Mgmt.
2-2-1	A.D.F.M.O.
2-2-2	
2-2-3	Engine Foreman
2-2-4	Lead Fire Prev. Tech.
2-3	T.M.O.
2-3-1	Hydrologist
2-3-2	Wildlife Biologist
2-4	Const. and Maint. Sup.
2-4-1	C & M Foreman
2-4-3	Sewer Plant Operator
2-4-4	Asst. S.P.O.
2-5	Visitor Info. Off.
2-5-1	Biological Info. Off.
2-6	Recreation Officer
2-6-1	Asst. R.O.
2-6-2	C.P. Foreman
2-8	Lands Officer
2-8-1	Asst. Lands Officer
2-9	Winter Sports Spec.
2-9-1	Asst. Winter Sports
2-9-2	Snow Ranger
2-9-3	Snow Ranger
2-9-4	Nordic Snow Ranger
2-0	Wilderness Foreman
2-0-1	Wild. Ranger Shadow
2-0-2	Wild. Ranger Waugh
2-0-3	Wild. Ranger Purple
2-0-4	Wild. Ranger Convict
2-0-5	Wild. Ranger Minarets
2-0-6	Wild. Ranger Cascade
Eng.2-1	Mammoth
Eng.2-2	Mammoth
Pat.2-1	Front Country
Pat.2-2	Mammoth
Pat.2-3	Lakes Basin
Pat.2-4	Reds Meadow

White Mountain

3-1	District Ranger
3-2	Fire Mgmt. Officer
3-2-1	Asst. Fire Mgmt. Off.
Eng.3-1	Bishop
Eng.3-2	Rock Creek
W/T-3-1	Bishop
W/T-3-2	Bishop
Pat.3-1	Bishop
Pat.3-2	Rock Creek
Pat.3-3	Dyer
Pat.3-4	Swing
3-3	Resource Officer
3-3-1	Wildlife Biologist
3-3-2	Range Conservationist
3-4	Maint. Mechanic
3-4-1	C & M Asst.
3-5	Biological Info. Spec.
3-5-1	Naturalist Supv.
3-5-2	Public Info. Tech.
3-6	Recreation Officer
3-6-1	Recreation Supv.
3-6-2	Bishop Ck. Plant Area Mgr.
3-6-3	Recreation Asst.
3-6-5	Bishop Creek Area Manager
3-6-6	Big Pine Area Manager
3-6-7	C & P Crew Foreman
3-6-8	C & P Crew
3-7	Bishop Ck. Treat. Plt. Supv.
3-7-1	Rock Ck. Treat. Plt. Oper.
3-7-2	Asst. Rk. Ck. Tr. Plt. Oper.
3-7-3	Asst. Bis. Ck. Tr. Plt. Op.
3-8	Lands Officer
3-8-1	Minerals Specialist
3-0	Wilderness Supervisor
3-0-1	Wild. Ranger Hilton & McGee
3-0-2	Wild. Rgr. Rock Ck. Mono Pass
3-0-3	Wild. Rgr. Pine Creek, Gable Creek, Horton
3-0-4	Wild. Rgr. Sabrina, Lamark, Piute
3-0-5	Wild. Rgr. Bishop Pass, Baker Creek, Tyee
3-0-6	Wild. Rgr. Big Pine, Taboose, Birch, and Red Lakes
3-0-7	District at large
3-0-8	District at large

Mount Whitney

4-1	District Ranger	4-6-5	Lone Pine Drain Mgr.
4-2	Fire Mgmt. Officer	4-6-6	Campground Maint.
4-2-5	Helitack Foreman	4-7	Range Officer
4-2-6	Asst. Helitack Foreman	4-7-1	Range Conservationist
4-3	Fisheries Biologist	4-8	Lands Officer
4-5	V.I.S. Center Director	Eng.4-3	Lone Pine
4-5-1	V.I.S. District Director	Pat.4-3	Independence
4-6	Recreation Officer	Pat.4-4	Lone Pine
4-6-1	Asst. Recreation Officer	Pat.4-5	Monache
4-6-2	John Muir Area Director	Copter 525	Independence
4-6-3	Golden Trout Area Director	Helitack 525	Independence
4-6-4	Independence Drainage Mgr.	Helitender 525	Independence

"INYO" - The radio call sign for Owens Valley Interagency Dispatch Center. The Inyo is going to a system where a set of maps is divided equally into 160 acre parcels and fire locations are pinpointed by using the coordinates of this parcel. A fire location may come over the radio as "Quad LG (designation of the map sheet) - B7. No more can you look at your forest recreation map and follow the location of a fire by listening to township, range, and section then finding it on your map. The Inyo will be getting an Apple computer this year and going to C.A.D.S. Apparently the Angeles and San Bernardino National Forests have been on the above system for two years and the rest of Region 5 is going to follow suit. This year the USFS will be going to NIMS (National Incident Management System) nationwide. NIMS is a close copy of ICS (Incident Command System) used in South Zone Region 5 forests and by all local and state fire units there. Inyo has a Bearcat 220 mounted in their console, which also has the video screens mounted in it which will be used when they implement CADS.
Other Inyo N.F. Freqs. are 168.20 (Boise Cache Tac 2) sometimes called crewnet, it is channel 3 in the Inyo N.F. radios. They also use 415.25 and call it "Service", which is a logistics net for the forest. They will be putting Wulfsberg radios in each mobile. Ah, technology!

Wildland Fire buffs may be interested in maps from CDF available from:

State Dept. of Forestry
Graphic Dist. Center
1416 Ninth St. Room 1550
Sacramento, CA 95814

They have a pamphlet called "Maps of California" which shows a great number of maps that are available. Those of greatest interest to fire buffs are: Wildland Fire protection by Agency -1974- colored - this map shows CDF facilities and areas protected by state, federal and other agencies, $3.00.
Air Tanker Dispatch guide-current year-one North half and one South half map. Shows Air Dispatch info overlayed onto the info shown on the map above and at twice as large of a scale.

Bishop CHP dispatches Bishop and Bridgeport units days and afternoons. They have no graveyard units. Bishop PD does dispatching at night if an officer is called out to handle a call. The CHP was not satisfied with Mono Co. Sheriff dispatching.

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From DAVID (CA-SF-025): SFPD redistribution of radio channels.

45.10	Low Band 1 G,H,I	Richmond, Ingleside, Taraval Solo m/c's (4Boy Units)
45.14	Low Band 2 C, D	Potreno, Mission
45.58	Low Band 3 A, B	Central, Southern
45.46	Low Band 4 E, F	Northern, Park

	PIC Zones	
460.225	1 G,H,I	Richmond, Ingleside, Taraval
460.125	2 B,C,D	Southern, Potreno, Mission
460.50	3 A,E,F	Central, Northern, Park
460.45	Citywide 1	Traffic Division Units
460.075	Citywide 2	Dept. Service Ch. Patrol
155.55		Narcotics (5 Nora), UCSFPD

Difference:
Low bands= Ch. 4 is no longer traffic channel, and 3 of 4 channels have 2 rather than 3 district stations.

PIC Zone 3= Southern Station "B" goes to PIC 2 and Park Station (F) goes to 3. Zones 1 and 2 traded a couple of districts as well.
Citywide 1= Is now traffic channel. All tows ordered on Citywide 1.

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UNITED STATES FOREST SERVICE
RADIO SYSTEM

Boise Interagency Fire Center

168.05	TAC 1
168.20	TAC 2
168.60	TAC 3
168.70	COMMAND 1 /170.975
168.10	COMMAND 2 /170.45
168.075	COMMAND 3 /170.425
168.625	NATIONAL AIR CH.
166.675	AIR TACTICS 1
169.15	AIR TACTICS 2
169.20	AIR TACTICS 3
170.00	AIR TACTICS 4
414.65	LOGISTICS 1/410.775
415.40	LOGISTICS 2
415.50	LOGISTICS 3

Bureau of Land Management

167.95	Air-ground
166.4875	Riverside F1
167.075	Riverside F2
166.375	Bakersfield
166.975	
167.00	
168.55	Calling Freq.
166.725	
166.775	
168.25	
168.475	

REGION 5

169.925/170.525	
415.375	Admin. Net
166.5625	South Zone Dispatch
164.9125	" " "
415.525	" " "
415.55	Air Net (168.625)

Angeles National Forest *PAT 169.20

171.575/172.375	
415.325	Johnstone
415.225	Lukens
415.425	
169.95	Fire Net

Cleveland National Forest *PAT 166.675

168.75/168.15	170.50
415.275	168.125 Admin.
415.25	415.45

San Bernardino National Forest

171.475/172.225	*PAT 169.15
415.475	
415.575	
415.35	
164.125	Service Channel
169.875	

National Parks		*Pre Assigned Air Tactics Channel (PAT)
170.075	Lassen Park	166.675
170.05	Point Reyes	-
171.75	Sequoia-Kings	169.15
171.65	Yosemite-Kings	169.15

National Forest	Local Freq.		Call Sign	Pre Assigned Air Tactics	
Eldorado	171.525	R	El Dorado	166.675	Placerville
Inyo	168.175	R	Inyo	166.675	Bishop
Klamath	164.175	R	Klamath	166.675	Yreka
Lassen	172.225	R	Susanville	166.675	Susanville
Los Padres	170.55	R	Los Padres	166.675	Goleta
Mendocino	169.175	R	Mendoino	169.15	Willows
Modoc	168.75	R	Modoc	169.20	Alturas
Six Rivers	168.725	R	Six Rivers	169.20	Eureka
Plumas	170.55	R	Plumas	169.15	Quincy
Sequoia	168.775	R	Sequoia	169.15	Porterville
Shasta	171.575	R	Shasta	169.20	Redding
Trinity	164.80	R	Shasta	169.15	Redding
Sierra	171.40	R	Sierra	169.20	Fresno
Stanislaus	168.75	R	Stanislaus	168.75	Sonora
Tahoe	168.775	R	Tahoe	169.20	Nevada City
LTBMU *	171.575	R	Lake Tahoe	169.15	Lake Tahoe
Toiyabe	169.875	R	Toiyabe	-	Reno, Nevada
Fremont	172.35	R	Fremont	-	Lakeview, Or.
Rogue River	169.175	R	Rogue River	-	Medford, Or.
Winema	169.925	R	Winema	-	Klamath Falls, Or.

Misc. Freqs.

118.95	AM	Emergency Air Tactics
122.85	"	Emergency Air Tactics
122.90	"	Emergency Air Tactics
122.925	"	Air Tanker Base Ground Control. Back-up air-to-air CDF.
119.975	"	Heliport Air Traffic Control.
154.28		OES State of Calif. White Net #1
154.295		OES State of Calif. White Net #3

* LTBMU - Lake Tahoe Basin Management Unit

Air Attack Aircraft

Forest	Air Attack #	Base
Angeles	01	Fox or Ontario
Klamath	05	Scott Valley
Lassen	06	Chester
Los Padres	07	Goleta
Six Rivers	10	Murray Field - Eureka
San Bernardino	12	Ryan Field
Sequoia	13	Porterville
Tahoe	17	Grass Vally
Sierra	15	Fresno
Plumas	11	Quincy

Helicopters

Forest	Helicopter #	Base
Modoc	501	Ambrose
Klamath	502	Scott Valley
Klamath	503	Happy Camp
Shasta-Trinity	506	Weaverville
Mendocino	508	Alder Springs
Lassen	510	Chester
Plumas	512	Quincy
Eldorado	516	Big Hill
Stanislaus	517	Bald Mountain
Sierra	520	Trimmer
Sequoia	522	Peppermint
Sequoia	523	Kernville
Inyo	525	Independence
Los Padres	527	Arroyo Grande
Los Padres	529	Rose Valley
Los Padres	530	Chuchupate
Angeles	531	Chantry Flats
Angeles	532	Tanbark
San Bernardino	534	Heaps Peak
San Bernardino	535	Keenwild
Cleveland	538	Ramona
Cleveland	540	Ramona
Yosemite N.P.	551	Crane Flat
Sequoia N.P.	552	Ash Mountain
Susanville BLM	553	Ravendale

****

That is it for this column. Happy monitoring.

PUBLIC SAFETY - WEST

Send Public Safety and Special Emergency frequencies, radio system details and questions for Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming to:

George Hoggatt, 17473 E. 16th Drive, Aurora, CO 80011.

Well, there is enough for a short column this month. Sure wish I would get enough to make the eight pages alloted for each column. It's all up to you. No information, no column. I can make some out of my files and Stan Hintz's book, but that won't carry a column. We have 12 states and maybe 200 members. That should make a multi-page column every month. SEND IN YOUR DATA. Don't worry that you don't know enough or that your information may be old hat. Unless it is copied out of last month's issue or Police Call, it is needed.

COLORADO Not a lot new on the Colorado front this month. The new Police call indicates that the new State Patrol frequency plan (see Five Year Plan in the May issue) is starting. Watch this space for more information as it developes.

I need help from the members: AURORA PD has "LSU" units that go to channel 6. I have not been able to locate this frequency. Can anyone tell me what that frequency is and what "LSU" stands for?

ARAPAHOE COUNTY SHERIFF may have as many as eight channels. Joyce Madden (CO-32) has given me a tentive list but I would like to have it confirmed. Please help. The frequencies are:

FREQ	CHAN	REMARKS
155.670	1	Main dispatch channel
155.415	2	stand-by channel dispatch during emergencies
?	3	
154.025	4	Cherry Hills Local Govt.
155.805? 154.235?	5	County Local Govt. or Castlewood Dispatch
154.280?	6	FERN (Fire Emergency Radio Net) unconfirmed
154.875?	7	Englewood PD ch. 3
155.730?	8	Englewood PD dispatch

Some Sheeriff's cars can operate on CSP channel 3 (154.905)

A few members have asked what my abbreviations mean. They were reported in my first column in Jan. 1981, but for the new members I'll repeat them here.

The general format of what I contribute and some contributions from others will be done this way. (That's a lousy sentence, but I'm not going to go back and change it.) The first column will contain the licensee, the second will be the bas frequency, the third the mobile frequency. The forth column headed TYPE is really 2 columns, one for the service and one for the type of transmitter. The last is a column for remarks. The service abbreviations and transmitter types are:

FIRST TWO LETTERS (SERVICE)
Public Safety Radio Services:
PP Police Radio Service
PL Local Government Radio Service
PF Fire Radio Service
PH Highway Maintenance Radio Service
PO Forestry Conservation Radio Service
PS Special Emergency Radio Service

Industrial Radio Services:
IB Business Radio Service
IF Forest Products Radio Service
IM Motion Picture Radio Service
IP Petroleum Radio Service
IS Special Industrial Radio Service
IT Telephone Maintenance Radio Service
IW Power Radio Service
IX Manufacturers Radio Service
IY Relay Press Radio Service
EX Experimental

Land Transportation Radio Services:
LU Urban Passenger

SECON TWO LETTERS (TRANSMITTER TYPE)
BA Base station only
MO Mobile station only
BM Base and Mobile
RP Repeater
OF Operational fixed (usually microwave)
FX Fixed (point to point)
CO Control station
PO radiolocation mobile (radar)
ZO Zone police (teletype backup with morse code)
IZ Interzone police (same as ZO)

COLORADO SPRINGS AREA (Donald Bishop - CO-002)

LICENSEE	BASE	MOBILE	TYPE	REMARKS
Broadmore FPD	154.010	154.010	PF BM	
Cascade FD	154.430	154.430	PF BM	
Cimarron Hills FD	154.205	154.205	PF BM	
Fountain FD	154.100	154.100	PF BM	
Ivywild-Cheyenne Canon FD	154.250	154.250	PF BM	

Security FD	154.175	153.890	PF RP?	
Stratmoor Hills FD	154.220	154.220	PF BM	
Woodmoor FPD	154.355	154.355	PF BM	

UTAH (Michael Scheel - IA-011)

Daggett County	156.015	155.040	PL RP	Using DVP scrambler
Uintah County Sheriff	155.670	154.845	PP RP	
Vernal PD	155.640	155.640	PP BM	
Vernal FD	154.085	154.085	PF BM	
Utah State Police	155.505	155.505	PP BM	Ch. 1 State/local/Fed.
	155.550	155.550	PP BM	Ch. 2 local dispatch
	155.745	155.745	PP BM	Ch. 3 car to car
	155.700	155.070	PP RP	Repeater net
Conservation	159.240	?	PO RP	phone patch
	159.285	?	PO RP	phone patch

Michael also notes that Steamboat Springs PD is heard on 154.800 repeater, input unknown. They interfer with Rock Springs Wyoming PD. This is not in Police Call. Anyone have any information?

KING COUNTY WASHINGTON (Stan Hintz - OR-019)
Star has sent a map of the County Sheriff's Department Districts. This map is copyrighted by Stan in addition to the news letters copyright. Stan has given permission to reprint it. The black areas are cities that have their own system and are not on the Sheriff's radio.

Unit numbers consist of a 1, 2, or 3 indicating the shift followed by a letter and number that indicate the district as shown on the map.

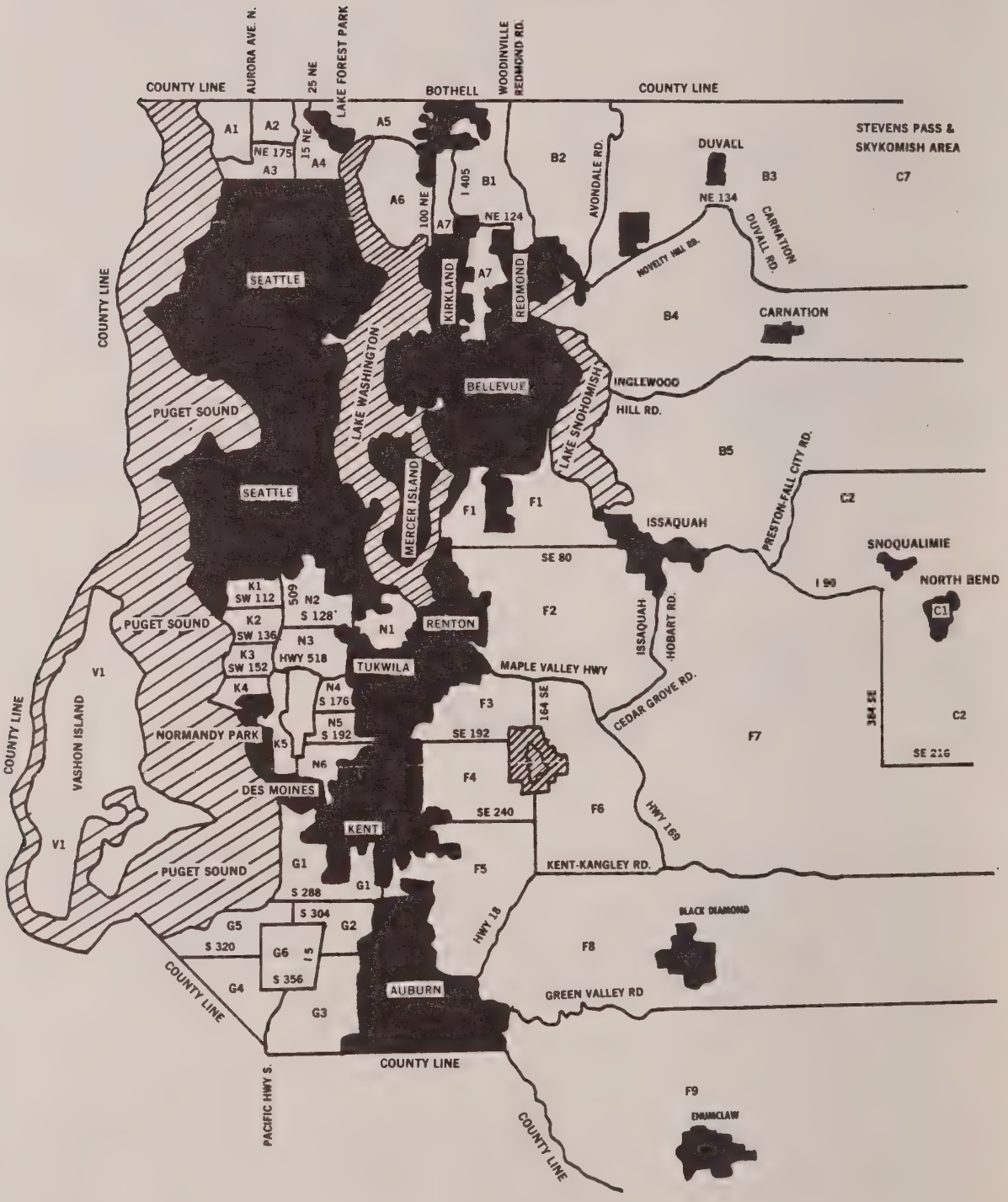
Map shown on page 76.

Miscellany

Fair Radios new 1982 catalog of the "worlds finest electronic surplus" is out. There are disappointingly few new items. They still have the R-278/GRC synthesized receiver for the 225-400 mHz band for $150 (and probably that much more for shipping, too) and the R-482/URR-35 tunable for $90, $145 checked (and probably in better shape). On page 25 they again have the transistorized guard channel (243 mHz) receivers for the ARC-27. They're now only $12.95 and make a great single channel receiver with the addition of a power supply, an audio amp and a speaker. I've run them up to 255.4 with only a new crystal and simple retuning. By replacing all the RF coils I ran another one clear up to 298 mHz. If you know what you want to listen to, these are definitely a good buy in a single channel UHF receiver. And about one-twentieth the size of an R-361. Fairs address is Box 1105, Lima, Oh. 45802. Don't overlook the F-195/U 163-184 mHz bandpass filters on page 6. They work great with a scanner. (Order the UG-536 connector on page 16.) Also, the 27 amp dynamotor on page 10 for $99.50. What a deal!

George DuBois

King County
Department of Public Safety
Patrol District Map

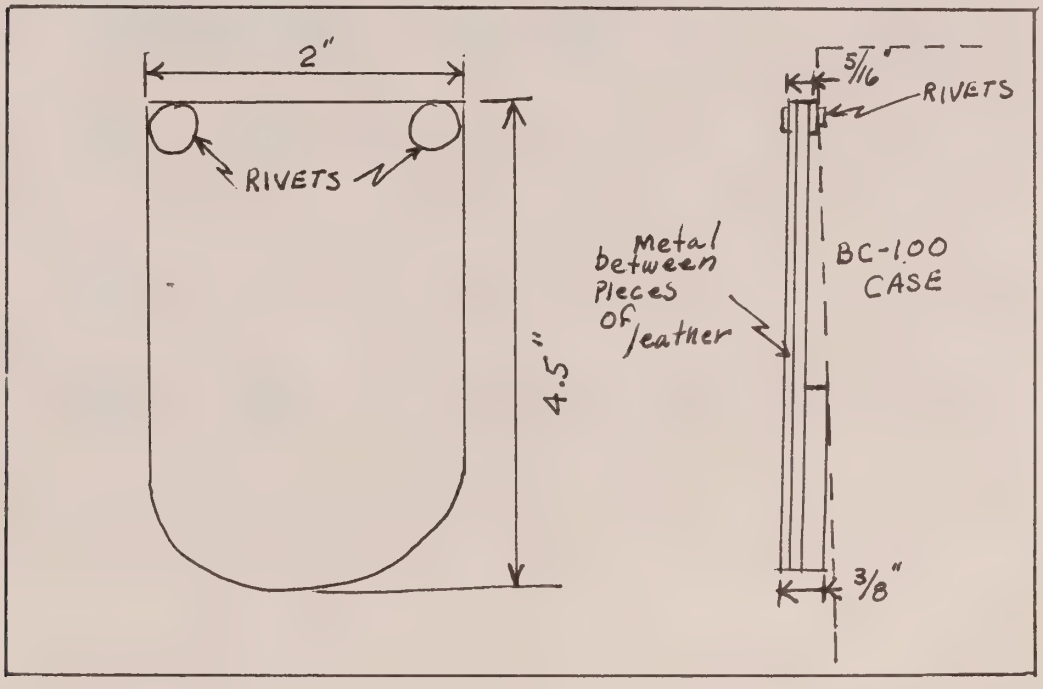


ANOTHER REVIEW OF THE BC-100 PORTABLE SCANNER

Since my experience with the BC-100 is different than the other reports that have been appearing, I'll bore you with another.

As far as I am concerned, this is the best scanner I have owned (and I have owned a bunch.) First the bad parts: the keyboard is bad. There is no positive feed back as is found on the BC-220. The keys tend to stick and then the radio does very strange things, such as displaying partial numbers. When you press the enter button, nothing happens to indicate the frequency has been accepted. The leather case is not too good either.

Other than those problems, it is a great radio. The volumn is adequate even in a vehicle except with the windows down in heavy traffic. The sensitivity is good enough to permit its use in the car on the seat. Selectivity is excellent and intermod rejection is about average for a scanner.



BC-100 leather case modification

Instead of adding a belt clip to the back of the unit, I had the case modified by a local shoe repair store ($10). See the diagram for details. The bottom of the new flap is not attached to the case and when slipped over your belt, the piece on the bottom hold it securly. The new flap MUST be reinforced with a strip of metal.

The Radio Shack power cord seems to work. The antenna trick helps on VHF high band but has no effect, good or bad, on UHF.

Sure wish it covered aircraft too. (Are you listening BEARCAT?)

The rated eight hours per charge is close

For the record, my unit has a serial number of 013585.

That's all folks.

PUBLIC SAFETY COLUMN READERS AND CONTRIBUTORS —

Please note the following 'redistricting' for the columns previously called PS - Central and PS - East.

Public Safety - Great Lakes: Illinois, Indiana, Wisconsin, Michigan, Kentucky, and Ohio

Public Safety - North Central: Iowa, Kansas, Missouri, Nebraska, N. Dakota, S. Dakota, and Minnesota

Public Safety - South Central: Alabama, Arkansas, Louisianna, Mississippi, Tennessee, Oklahoma, and Texas

Public Safety - Northeast: New England states, New York, Pennsylvania, New Jersey, Maryland, and Delaware

Public Safety - Southeast: Florida, Georgia, N. Carolina, S. Carolina, W. Virginia, Virginia, and District of Columbia

The purpose of these changes is to lighten the load on the present editors. New editors are needed for PS - North Central and PS-Southeast. Members in these areas who have enjoyed - and perhaps contributed to - the Public Safety column: please consider heading up one of these columns. It's certainly a way of getting involved in our club, and it's a rewarding experience. You do have to own (or have access to) a typewriter, and of course you must be a member in good standing of RCMA. Think about it; if you're interested, contact Assistant Editor Ginny Slick (address inside front cover).

The rest of this issue's Public Safety material is given pretty much under the old geographic grouping; look for the new area listing next month.

A special note to those who contribute to Public Safety - Central: Have you sent in material during the past few months and are beginning to wonder what the heck happened to it? If a new PS North Central Editor does not appear on the horizen before the August issue, I will put together all the copy that has been forwarded to me, and publish a column. Thank you for your patience and your interest.

Carol Ruth
RCMA Editor

PUBLIC SAFETY - South CENTRAL

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — Alabama, Arkansas, Louisiana, Mississippi, Oklahoma, Texas, and Tennessee:
Ken Pehl, 108 E. Centre St., Fredericksburg, Texas 78624.

Welcome to this edition of the Public Safety-Central sub-column. I have a lot of info to pass on to you so there is no time for chit-chat. I do want to wish you a very pleasant summer vacation wherever you may go. Now without further ado, here is Gary's, TX-94, report on East Texas County radio systems, as promised oh so long ago. Due to the length of the material involved, the report will be presented in installments.

From GARY, TX-94:

EAST TEXAS COUNTIES' RADIO SYSTEMS

Unless otherwise noted all law enforcement departments have channel 3 and channel 4 and are equipped with the standard "Texas Inter-city" frequencies in these channel positions (154.950 & 155.370), as previously discussed in earlier issues. Furthermore, in instances where a municipality's PD is dispatched on a frequency separate from the Sheriff's Office (SO) frequency, the

PD mobiles are equipped with the SO ch. and sometimes but not always vice versa. The respective law enforcement agency's bases usually have transmit capability on the other agency's frequency, unless otherwise noted. (Editor's note: This is usually a wire-line tie-in to the other agency's transmitter control console. This will help explain the sometimes apparent lack of a transmitter license on the other agency's transmit frequency.)

ANDERSON COUNTY

LAW ENFORCEMENT CH's.

Ch. 1 154.755 R (156.090 input) KUV 621--Anderson Co. SO--primary dispatch
Ch. 2 155.250 B/M KUV 620--Palestine PD--primary dispatch
(note: SO mobiles are equipped with PD ch 2 and PD mobiles are equipped with SO ch 1)
37.180 & 37.260 B/M KKA 581--use unknown at this time

Unit numbers:
501--511 = Sheriff & Deputy units
801--803 = County J.P. Constables
531/532 = Frankston PD units (dispatched by SO)
1--50 = Palestine PD units

State units on this SO ch.:
DPS--- 6160--6164 = THP units (6306=Sgt.)
6608 & 6653= L&W units
6725 = MVI unit
P&W--- 3107 & 3111= Wardens
3104 = Dist. Supervisor

FIRE DEPT. & EMS/AMBULANCE CH's.

154.190 B/M KLA 439--Palestine City FD--dispatch and fireground
(note: The Palestine PD and Hospital have transmit capability on fire ch.)
Units:
F1--F10 = Fire units (distributed in 2 station locations)
820, 821, 822 = Ambulance units

158.835 R (153.875 input) KRA 427--Elkhart City FD--dispatch & fireground
(Editor's note: The '82 POLICE CALL shows a license for 46.12--Anderson Co.)
Note: The Texas Forestry Service also provides fire protection to this area. See the article on TFS in the May, 1982 issue of the newsletter for more info.

LOCAL GOVT CH's.

155.040 R (153.935 in) KJK 303--Anderson County Road Dept.
155.955 B/M KKL 549--Palestine City Street & Water Dept. (Editor's note: The 1982 POLICE CALL does not list any mobiles licensed for this frequency.)

CHEROKEE COUNTY

LAW ENFORCEMENT CH's.

Ch. 1 155.130 R (154.650 in) KUQ 553--Cherokee Co. SO-primary dispatch
Ch. 2 154.785 R (155.970 in) KUQ 555--Jacksonville PD--primary dispatch
(Note: City of Rusk, TX PD is dispatched on SO ch by SO. Jacksonville, TX PD base equipped with ch. 2 only. Mobiles of all three agencies equipped with both channels.)
(Editor's note: The Ch. 2 base station license and callsign does not appear in any recent edition of Police Call, indicating the license is probably expired. Any Cherokee Co. officials reading this take note!)

Unit numbers:
501--509 = Sheriff & Deputy units
801--807 = County J.P. Constables
650--670 = Wreckers
400's = Sheriff's Reserve Deputies
101 = Rusk PD Chief
104--108 = Jacksonville PD--Sgts.
215--240 = Jacksonville PD--Patrol units
250--259 = Jacksonville PD--Reserves
260--269 = Rusk PD--Patrol units
270--279 = Rusk PD--Reserves

State units using SO ch.:
DPS---6360--6363 = THP units--north/Co.
6165--6168 = THP units--south/Co.
6306 = THP Sgt.
6653 = L&W unit
6725 = MVI unit
P&W---3209 & 3210 = Wardens
3204 = District Supervisor
3004 = Region 3 Director (supt.)

FIRE DEPT CH's.

154.175 B KZO 208--Jacksonville City FD--dispatch pager only
37.260 B/M KKC 443--Jacksonville City FD--communications
(Note: 37.260 also used by Jacksonville PD and by Jacksonville City Water Dept.)

Units: 32--39 = Fire units (35=Chief) located in three stations.

154.995 B/M KRB 421--Rusk City FD--dispatch & fireground
37.100 B/M KTL 578--Rusk City FD--communications
(Note: 37.100 also used by Rusk City PD & Water Dept.)
Units: 301--306

Note: TFS is active in county with fire protection also.

HOSPITALS & EMS/AMBULANCE CH's.

Jacksonville area---
Newburn Memorial Hosp., Newburn Amb. Svc., and Nan Travis Memorial Hosp. all use the following system:
Ch. 1 155.400 -- KNCL 552--primary ch.
Ch. 2 155.340 -- KNCL 552--secondary ch.
Ch. 3 154.950
Ch. 4 155.370 (rx only)
Units: 600--610 = Ambulance units

Rusk area---
Rusk Memorial Hosp.--155.340--KMA 969--Base/mobile communication
Units: 200--210 = Ambulance units

MISC. CH's.

Jacksonville Independent School District--155.280--B/M--WRL 620--buses
Rusk State Hosp.--(a state agency)--155.085--B/M--KAW 828--primary ch.
155.715--KAW 828--not in use at present
Units: 2200's = Administration units, 3300's= Security units
(Note: Rusk State Hosp. is a state mental facility. All criminally insane patients are housed at this facility.)

LOCAL GOVT CH's.
37.260--B/M--KKC 443--Jacksonville City Water Dept.
37.100-B/M--KTL 578--Rusk City Water Dept.
(Note: Both channels above used by their respective city PD & FD also.)

HOUSTON COUNTY

LAW ENFORCEMENT CH's.

CH. 1 154.875 R (155.430 input ??) KUZ 809--Houston Co. SO--dispatch
Ch. 2 none known
(Note: City of Crockett PD dispatched on SO ch by the SO.)
(Editor's note: Houston Co. licenses have not been in the Police Call book recently, suggesting the license has expired or for some other reason is not listed. Further--Houston Co. was licensed for 155.625 mobiles, suggesting that they do have Nacogdoches PD ch in their vehicles. See Nacogdoches County list.)
37.180 & 37.260 B/M KKB 232--county license--use unknown at present

Unit numbers:
75--79 = Sheriff & Deputy units
80--84 = County J.P. Constables
330--339 = Crockett City PD units
Medic 1, 2,3, & 4 = Ambulance units
(amb. is dispatched on SO ch.)

State units on SO ch.:
DPS--- 6176--6179 = THP units
6307 = THP Sgt.
P&W--- 3306 & 3310 = Wardens
3304 = Warden Supervisor

FIRE DEPT. CH's.

45.120 B/M KBG 806--Crockett City FD
Units: K1--K15
Note: The TFS and USFS also are in the county area providing fire protection.

MISC. CH's.

Texas Youth Council (a state agency--correctional facility for children)--
Crockett State School--156.015 B/M KZV 307--primary ch.
155.370 B KZV 303--intercity base
Units 600's series

NACOGDOCHES COUNTY

LAW ENFORCEMENT

Ch. 1 154.830 R (155.655 in)--KUZ 813/WRE 63--County SO--primary dispatch
Ch. 2 154.770 R (155.625 in)--KUZ 814--Nacogdoches PD--primary dispatch
(Note: The Ch. 2 base license has not been listed in Police Call since the 1978 edition, again suggesting an expired license.)

Unit numbers:	State units on SO ch.:
501--516 = Sheriff & Deputy units	DPS--- 2260--2265 = THP units
520--550 = Sheriff's Reserve units	2406 = THP Sgt.
801--804 = County J.P. Constables	2646 & 2647 = L&W units
701--704 = J.P.'s	2738 = MVI unit
901--904 = District Attorney & Asst's.	
101 = Nacogdoches PD Chief	P&W---3206 & 3207 = Wardens
201--219 = Nacogdoches PD--Patrol units	
310--320 = Nacogdoches PD	
400--415 = Nacogdoches PD	

Stephen F. Austin University PD CH's:
Ch. 1 155.790 R (input ??) KJH 587--primary PD dispatch--(a state license)
Ch. 2 154.770 R (155.625 in)--mobiles only--co-ordination with Nacogdoches PD.
Units: 240's series
155.100 & 155.145 B/M--KWI 920--state licenses--not active at present
(Note: University PD units are known to be equipped with the Nacogdoches SO channel. Position channel number is unknown. Probably ch. #5??)

FIRE DEPT. CH's.

County Fire ch--154.370 R (153.770 in)--WDT 401--(the SO dispatches all VFD's in county on this ch.) --dispatch & fireground
Units: 710--790 = various county Vol FD's

Nacogdoches City FD--460.575 R --WSW 320--Dispatch & fireground
Units: located in 4 stations---
Central stn.--309, 310--Engines Units-- 900 = Chief
712 = Rescue 961 = District Chief
409 = Ladder 965 = Fire Marshall
Stn 1-- 306 = Engine, 219 = Booster
Stn 2-- 318 = Engine, 516 = Tanker
Stn 3-- 305 = Engine, 217 = Booster, 515 = Tanker
Note: TFS is active in area

HOSPITAL & EMS/AMBULANCE CH's.

Nacogdoches Memorial Hosp.-- 155.160-B-- KZF 897--pager only
155.340 B/M--KAE 634--Hosp./Amb. communication
(Editor's note: neither license listed in Police Call.)

Nacogdoches Medical Center -- 163.250--B--KZG 450--pager only
155.340--B/M--KZF 878--Hosp./Amb. comm.
Units: Memorial's Ambulances numbers in the 600's series.

LOCAL GOVT CH's.

158.745 R (153.740 in)--KZJ986/WBL 291--County Road Dept.
45.520 B/M--KQU 336--Nacogdoches City Street & Water Dept.

Excellent report, Gary! Many, many thanks to you for sharing your notebook with us, Gary. Also thank you for your patience, Gary and readers! Next month Gary shows us Rusk and Smith Counties.

Russell, AR-3, has sent a very detailed, survey report for monitoring the State of Arkansas. His report is rather lengthy so it will be presented in a serial form over the next several months. Russell's report is broken down into police, fire, medical, local gov't., highway maintenance, forestry and fish & game radio services for the state, along with the appropriate graphic illustrations showing dept. districts, etc. This report will surely be welcomed and appreciated by all readers of the column. Russell adds he has been monitoring for about four years now and he hopes this article fills a gap in Arkansas coverage and also gets a little interest built up in Arkansas.

This month we present the info on Arkansas police monitoring. In addition, Russell has prepared an excellent travel monitoring map of the state for quick glance reference of important frequencies in specific areas. The map will be enclosed here; however, because of the concentrated details, the map may not reproduce well in the column after reduction. Therefore, I am going to offer full scale copies of the map to interested readers for a SASE plus an extra first class stamp (loose) to cover my copying costs. Send your requests to my address given in the column mast head.

MONITORING ARKANSAS (Part One)
by Russell Brummett, AR-3

POLICE

Arkansas State Police monitoring has been previously covered (Nov.'80 Newsletter) & shows the use of four VHF Lo-band freqs. in Districts A thru' L statewide (see map).

In Little Rock a repeater can be heard at Jefferson Springs (to the South) on 158.790 and a mobile extender can frequently be heard on 154.785. 44.620 is the main channel but both 44.660 and 44.740 are occasionally used for other than routine traffic.

Two interdepartmental freqs. (37.200 & 37.240) are used by the State Police and all County Sheriff's and Municipal Police Departments statewide. 37.240 is the most often used in the central Arkansas area for this purpose.

Most Sheriff's Departments and the smaller Municipal P.D.'s have one or two assignments in the 37.020 - 37.420 range (see the Feb. '81 Newsletter). The larger citys and more populated countys usually have a couple of assignments in the VHF-hi band.

Here is a confirmed list of police monitoring in Little Rock:

44.620	A.S.P. ch#2 (also 44.660 & 44.740)
154.785	" mobile extender
158.790	" Rp. Jefferson Springs
155.010	Pulaski County Sheriff, main channel
159.210	" " " , secondary channel
156.210	Little Rock P.D., main channel
155.610	" " " , secondary channel (10-86)
158.760(PL)	" " " ,(used by PD at night, 10-86-4)
159.150	North Little Rock P.D., main channel
158.850	" " " " , secondary channel
155.130	Jacksonville P.D., main channel
155.370	" " , secondary channel
154.815	Sherwood P.D.

155.580	Benton P.D.
155.565	Bryant P.D.
37.360	Saline County Sheriff (also Alexander P.D.)
154.800	Maumelle New Town D.P.S.
37.240	Interdepartmental

Also well within range of an omni-directional outdoor antenna:

155.415	Hot Springs P.D.
154.845	Garland County Sheriff
153.860(PL)	Hot Springs Village
37.340	Malvern P.D. (also Adkins P.D.)
37.300	Hot Springs County Sheriff
37.280	Grant County Sheriff
155.430	Pine Bluff P.D.
37.060	Jefferson County Sheriff (also 37.180)
45.200(PL)	Arkansas State Prisons, Tucker & Cummins
37.160	Arkansas County Sheriff
37.080	Lonoke Co. Sheriff (also England, Carlisle, Cabot P.D.s)
37.280	White Co. Sheriff (also Searcy & Beebe P.D.s)
37.140	Clinton P.D.
155.490	Conway P.D.
155.655	Faulkner Co. Sheriff (also 37.040)
37.320	Morrilton P.D. & Conway Co. Sheriff
37.160	Perry Co. Sheriff
154.860	Pope Co. Sheriff & Russellville P.D.
37.080	Danville P.D. (also 37.180)

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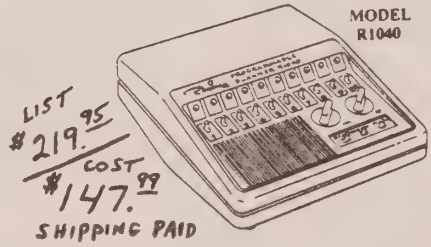

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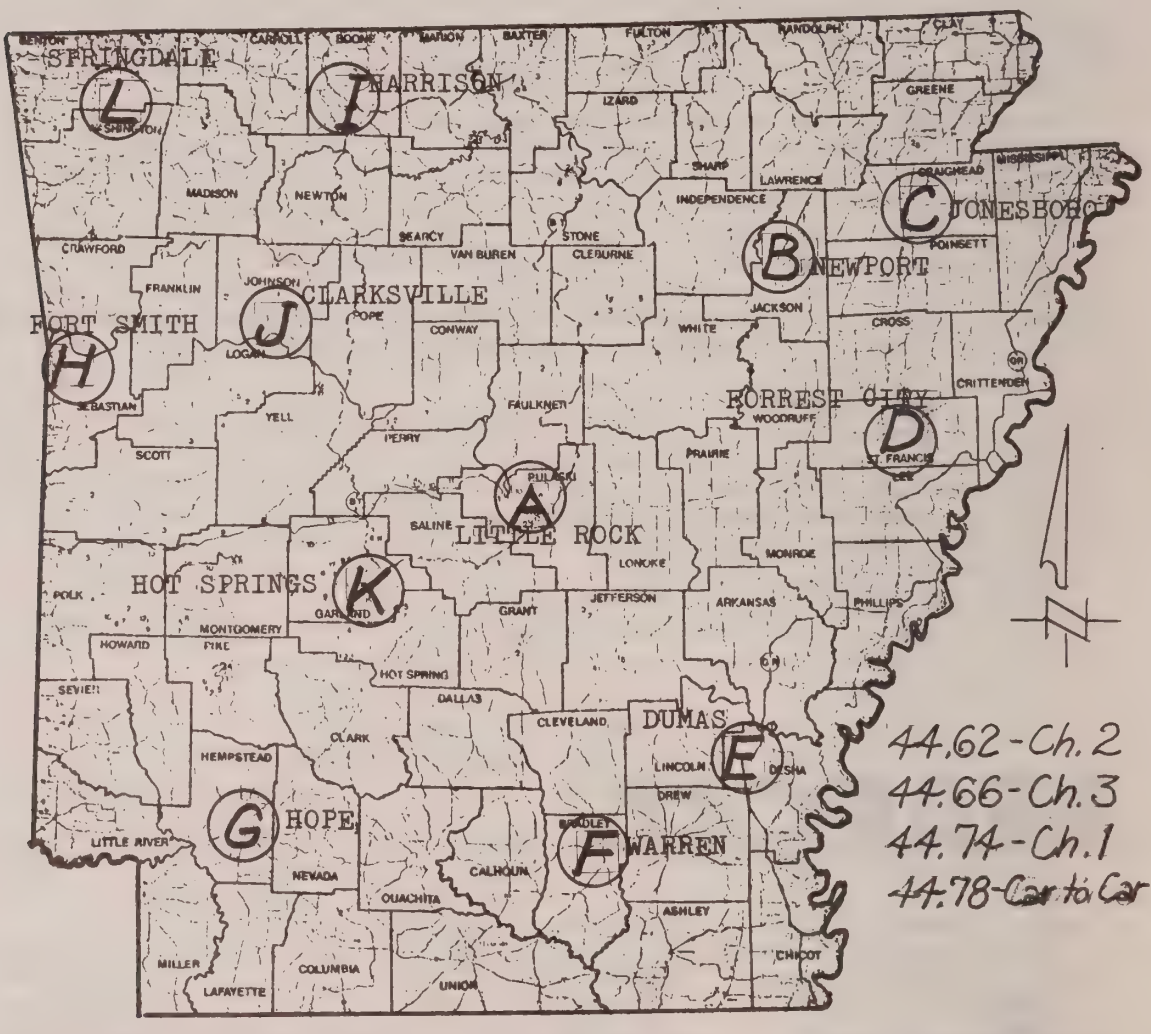
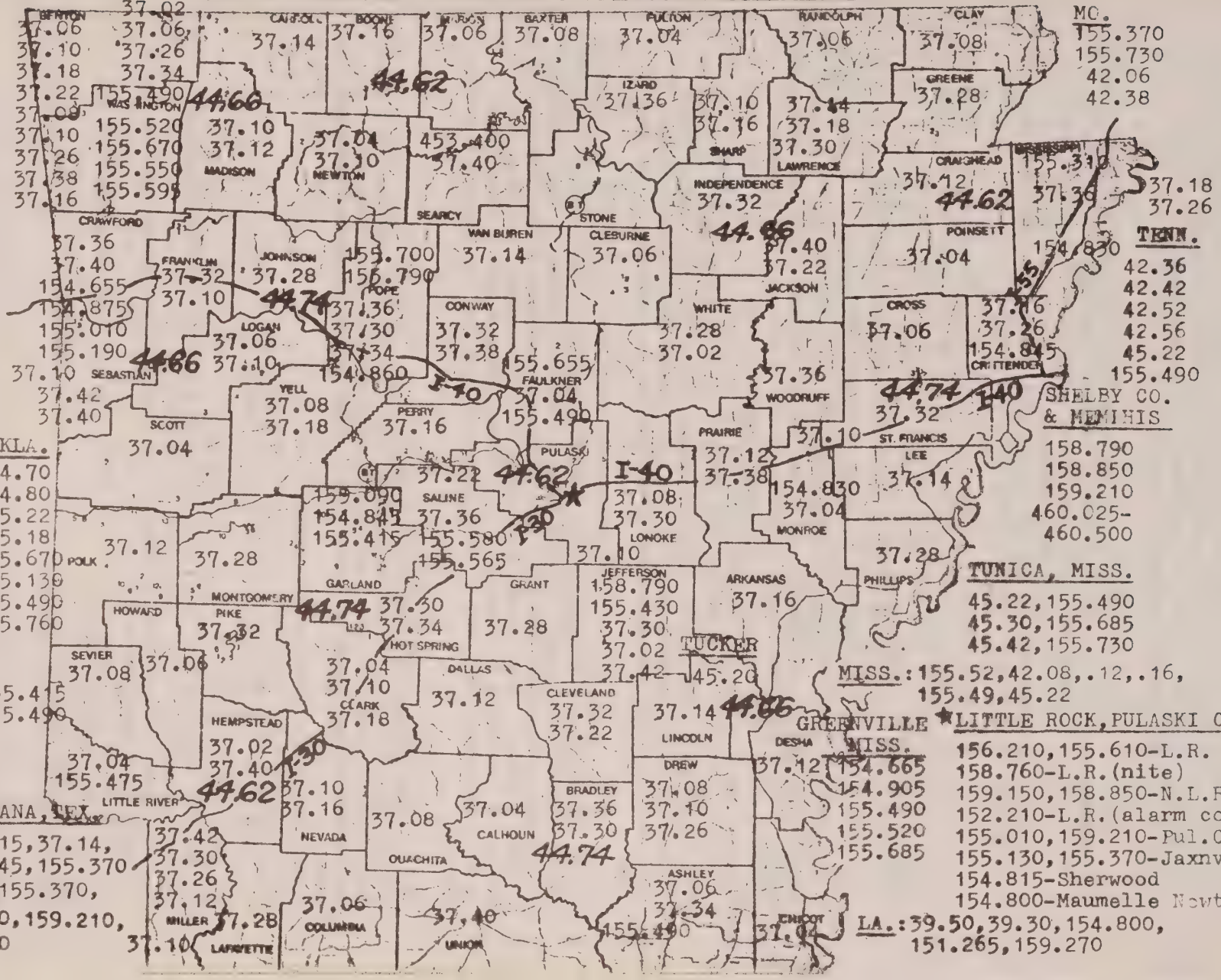


Troop - Location - Main Channel		Troop - Location - Main Channel	
A - LITTLE ROCK	- 2	G - HOPE	- 2
B - NEWPORT	- 3	H - FORT SMITH	- 3
C - JONESBORO	- 2	I - HARRISON	- 2
D - FORREST CITY	- 1	J - CLARKSVILLE	- 1
E - DUMAS	- 3	K - HOT SPRINGS	- 1
F - WARREN	- 1	L - SPRINGDALE	- 3

(Note: All channels are available for use in each location)

POLICE Frequency TRAVEL Map -- ARKANSAS 2/15/82



MO.
155.370
155.730
42.06
42.38

TENN.
42.36
42.42
42.52
42.56
45.22
155.490

SHELBY CO. & MEMPHIS
158.790
158.850
159.210
460.025-
460.500

TUNICA, MISS.
45.22,155.490
45.30,155.685
45.42,155.730

MISS.: 155.52,42.08,.12,.16, 155.49,45.22

GREENVILLE MISS.
154.665
154.905
155.490
155.520
155.685

★**LITTLE ROCK, PULASKI CO.**
156.210,155.610-L.R.
158.760-L.R.(nite)
159.150,158.850-N.L.R.
152.210-L.R.(alarm co.)
155.010,159.210-Pul.Co.
155.130,155.370-Jaxnvl.
154.815-Sherwood
154.800-Maumelle Newtn.

CKLA.
44.70
44.80
45.22
45.18
155.670
155.130
155.490
155.760

TEXARKANA, TEX.
154.815,37.14,
154.845,155.370

TEXAS: 155.370, 155.460,159.210, 159.270

LA.: 39.50,39.30,154.800, 151.265,159.270

Need I say more! Excellent report, Russell! I certainly want to thank Russell for his time to write this fine article and for his time to type it up in ready format. On behalf of the readers, a special "well done" word of praise, Russell! Next month, we will see Russell's report on Fire and Medical monitoring.

And with that this column must come to a close. I must again apologize for having to delay the conclusion of a report from last month. The 10-code list of David, LA-31, will be presented next month instead. One final thought, even though it is mid-summer, it is not too early to start thinking about your reports for the winter monitoring report column coming up in the December and January issues. Let's get those reports in the mail!

PUBLIC SAFETY - GREAT LAKES

Illinois, Indiana, Wisconsin, Michigan, Kentucky, and Ohio

John Arendt, 327 Boulder Hill Pass, Oswego, Illinois 60543.

Greetings and welcome aboard to summer, and travel away from the home area. While enroute to and from and at your destination, the area freqs. can be easily monitored-thanks to synthesized base/mobile and hand-held radios. (The well-equipped monitor will have his 9-volume set of "Police Call"-still available at a special price from the publisher out in NJ or from some selected dealers. Of course, there's always the local CB/scanner dealer for area freqs.) Don't forget to check on legality of mobile use of scanners-the states of MI and IN frown on this. (MI even bans radar detectors-best to keep them out of sight also!).

Out of area members passing thru this area are reminded of the Chicago Chapter session scheduled for July 31 at the usual meeting place-Nancini's in Nerkeley. A combination field day/ picnic is tentatively set for Aug. 29-more on this in later columns. Even though this column has been written some time in advance, I've already had inquiries from several members out CA way who plan to be in the area. Feel free to stop in, visit, and meet our group-you're most welcome!

CHICAGO AREA RCMA CHAPTER MEETING OF MARCH 6

The meeting was called to order at approx. 1:35 P.M. with 21 members and 7 guests from IL and WI present. Two special guests included an editor from our counterpart organization-SCAN and a friend. The following agenda items were discussed:

1. Introduction of members and guests.
2. John Arendt summarized current club business.
3. Ed Sirovy spoke on misc. publications available to the monitor (and radio) enthusiast.
4. Round table discussion among those present.
5. Our visitors from SCAN previewed their new publication ("SCAN Magazine") and answered questions about their organization.
6. John Arendt updated material about the IL Dept. of Law Enforcement (published in previous Newsletters).
7. Ed Sirovy gave a short slide presentation on the recent erection of a new TV tower in Chicago's loop.

The regular meeting was adjourned around 3:30 P.M. and was followed by informal sessions by those in attendance.

I.S.P. NEWS Dist. 17 has moved into the new HQ at LaSalle as of Feb. 23rd, 1982. Now ID's as "LaSalle". (The new HQ is located at the junction of I80 and IL351. The old HQ was located at the junction of I80 and US51 in Peru). Call sign remains as KE0371.

New I.S.P. Dist. 20 is being created at Pittsfield. It is arising out of the "old 14A". More info as it becomes available. Thanks to Tom (IL-030) for this.

DUCOMM ADDITIONS Rich (IL-173) reports that the Wheaton, IL P.D. and F.D. will be dispatched out of the DUCOMM center as of May 1st. The Bartlett, Il P.D. will switch dispatch responsibilities sometime in June. Freqs. to be used are:
Wheaton P.D. 471.1375 "West 3". (The old 155.565 dispatch freq. will be retained for "local use").
Wheaton F.D. 154.310 "West Fire"
Bartlett P.D. 470.6875 "West 1" (The old high band freqs. will be retained for "local use").

WARREN CO., IL S.D. will receive a new communication system later this year, per info received from William (IL-007). Most likely new freqs. will be utilized. (Editor's Note: It looks like another county moving away from the 39MHZ band.)

I've got two feature articles to present this month-both from MI members.

MICHIGAN DEPT. OF TRANSPORTATION RADIO NET courtesy of Dave (MI-071). Although this article would be more appreciated come Dec., the thoroughness makes it appropriate to be published at anytime. The next few pages literally speak for themself..

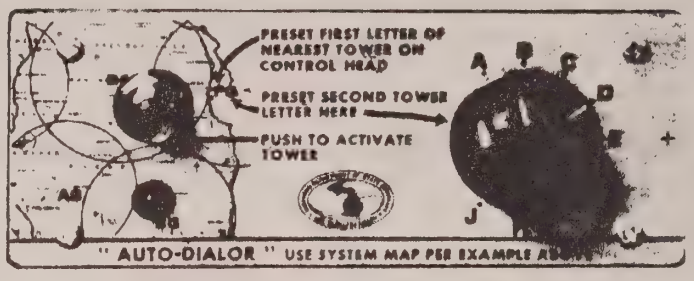
DETROIT AREA FIRE FREQS. courtesy of Robert (MI-108). Once again someone comes to the rescue of the editor and sends in a beautifully-prepared article. There's no story to tell-just a map, freqs., and call signs. (I'm sure that the Federal/Military and Canadian editors won't mind the few freqs. that "overlap" in this article).

With those two comprehensive articles, this column draws to a close. Enjoy summer plus some

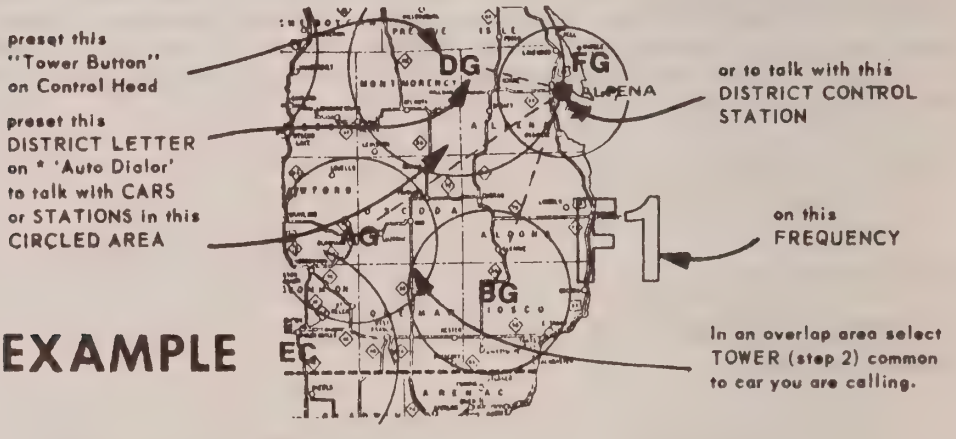
Happy Monitoring!

REVISED 7/81

MOBILE RADIO OPERATOR SIMPLIFIED INSTRUCTIONS


PRESET FIRST LETTER OF NEAREST TOWER ON CONTROL HEAD
PRESET SECOND TOWER LETTER HERE
PUSH TO ACTIVATE TOWER
" AUTO-DIALOR " USE SYSTEM MAP PER EXAMPLE

1. PRESET CHANNEL FOR TRAVEL AREA (F1, F2, F3, F4) ON CONTROL HEAD.
2. PRESET FIRST LETTER FOR NEAREST TOWER ON CONTROL HEAD.
3. PRESET SECOND LETTER ON 'AUTO-DIALOR'.
* 4. LISTEN. TRANSMIT ONLY WHEN YOU WILL NOT INTERFERE WITH OTHERS.
5. PUSH THE 'AUTO-DIALOR' BUTTON TO ACTIVATE SELECTED TOWER'
6. HEAR THE BEEP. (IF NO BEEP, WAIT ONE MINUTE AND REPEAT STEP 5.)
7. HOLD MICROPHONE CLOSE TO MOUTH, SPEAKING ACROSS THE MICROPHONE NOT INTO IT.
8. WHEN CALLING, IDENTIFY WHO YOU ARE CALLING, YOURSELF AND TOWER.
*9. END CONVERSATION WITH THE WORDS: "HIGHWAY(**YOUR NUMBER) CLEAR" AND IDENTIFY THE TOWER YOU HAVE USED.
10. HANG UP YOUR MICROPHONE.


preset this "Tower Button" on Control Head
preset this DISTRICT LETTER on * 'Auto Dialor' to talk with CARS or STATIONS in this CIRCLED AREA
DG
FG
ALPENA
AG
BG
EG
F1
or to talk with this DISTRICT CONTROL STATION
on this FREQUENCY
In an overlap area select TOWER (step 2) common to car you are calling.

EXAMPLE

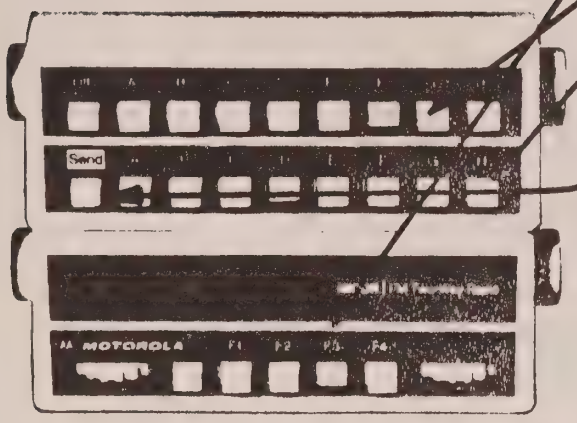
** THE NUMBER ON YOUR "MOBILE RADIO OPERATOR AUTHORIZATION" CARD.

* The F.C.C. Rules require steps 4 and 9 "to transmit communications essential to official highway activities of the licensee".

ALL USERS OF HAND CARRIER OR VEHICULAR RADIOS THAT DO NOT USE A TOWER SELECT AND DIAL ARE REQUIRED TO SIGN OFF WITH CALL LETTERS OF "KF9667".

If the radio used does not include correct F2, F3, or F4; F1 is provided at each tower as a service to individuals whose radio is not equippped to operate on the correct district channel and for access to State Police (page 4).

D. LAWSON MI-07



1. Preset channel for travel area (F1, F2, F3, F4) on control head. (Channel Select)
2. Preset first letter for nearest tower on control head. (Tower Select)
3. Preset second letter on control head. (Letter Dialed)
4. Listen. Transmit only when you will not interfere with others.
5. Push the "Send" button to activate selected tower.
6. Hear the beep. (If no beep, wait two minutes and repeat step 5).
7. Use microphone close to mouth for call and conversation.
8. When calling, identify who you are calling, yourself and tower.
9. End conversation with the words: "Highway (** your number) clear" and identify the tower you have used.
10. Hang up your microphone.

** THE NUMBER ON YOUR "MOBILE RADIO OPERATOR AUTHORIZATION" CARD.

THIS SERVICE SHOULD ONLY BE USED DURING HOURS WHEN THE DISTRICT OFFICE IS CLOSED. Normally, during business hours, emergency messages should be handled by District Operators.

TO CALL FOR STATE POLICE ASSISTANCE:
Normal operating procedure applies in the following manner.

A - USE CHANNEL F1 for step 1.

B - USE STEP 2, 3 & 4.

C - PUSH THE "AUTO DIALOR" SEND/ACTIVATE BUTTON (step 5). HEAR THE BEEP AND IMMEDIATELY PUSH THE SEND/ACTIVATE BUTTON AGAIN.
(You should hear two tones, in sequence, which turn ON the State Police receiver.)

D - CALL "STATE POLICE" , identify yourself by your permit ** number and identify the tower you are using (step 8).
(A State Police Post, with jurisdiction, will respond. You cannot designated a desired State Police Post.)

E - If you fail to receive an answer within 2 minutes, repeat procedures C & D. (Due to the nature of Police procedures, they may have been unable to listen to your first call and thus may not identify the tower you are using.)

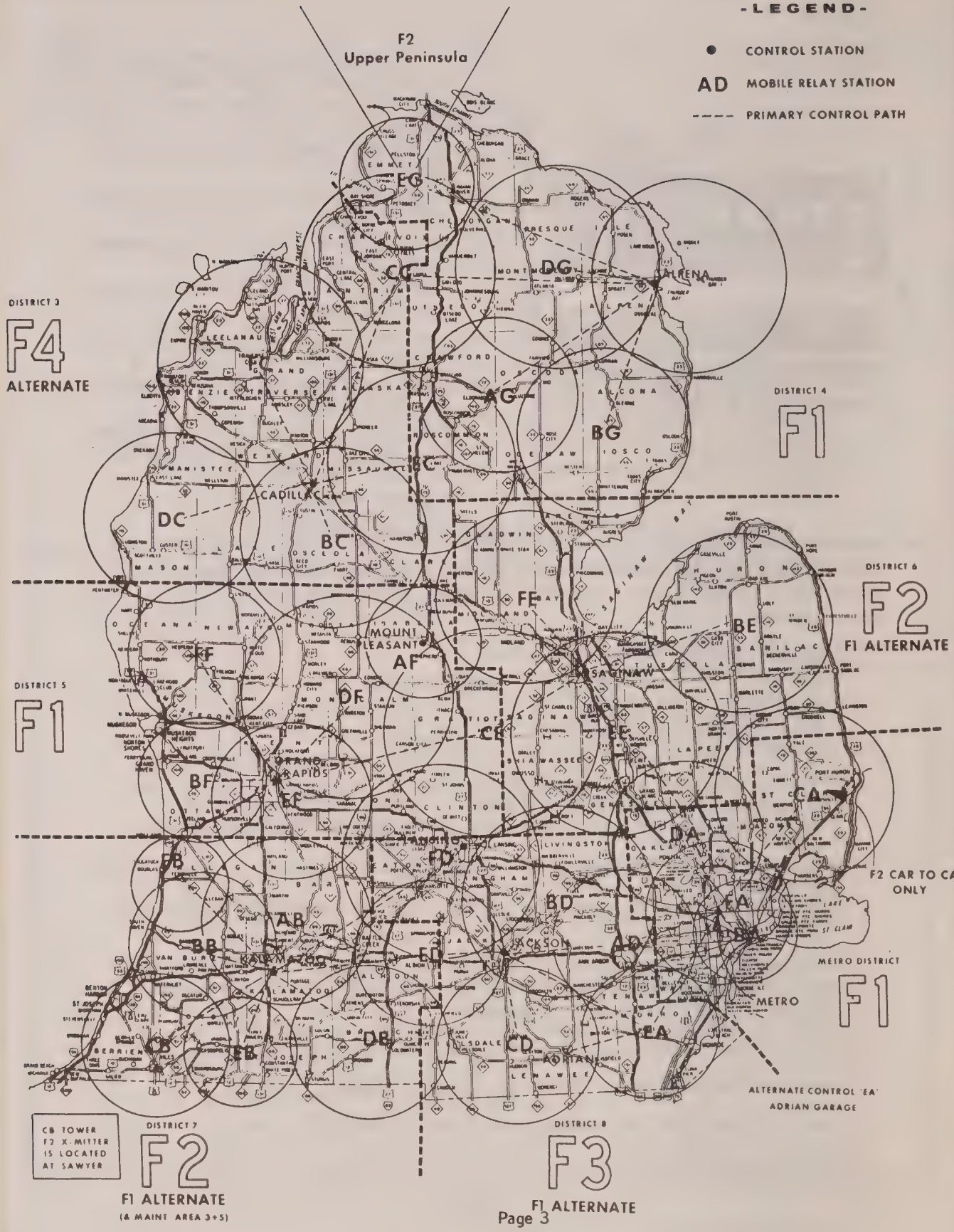
F - WHEN STATE POLICE ANSWER, GIVE YOUR MESSAGE CLEARLY.

G - SIGN OFF. (State Police will sign off with discrete call letters.)

H - SWITCH BACK TO YOUR DISTRICT'S WORKING CHANNEL (step 1).

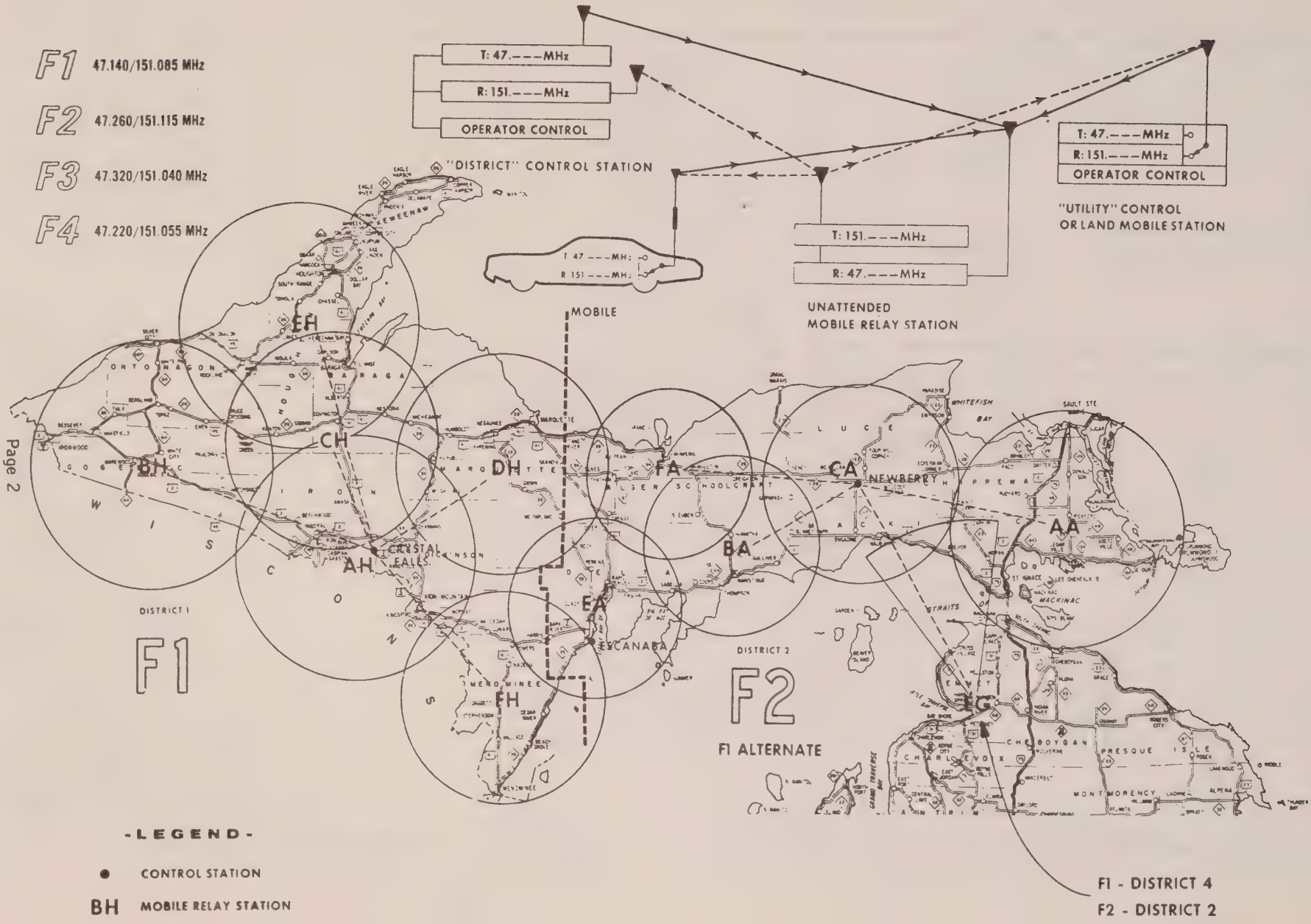
IF NO STATE POLICE RESPONSE ON F1, SHIFT TO DISTRICT WORKING CHANNEL AND TRY AGAIN.

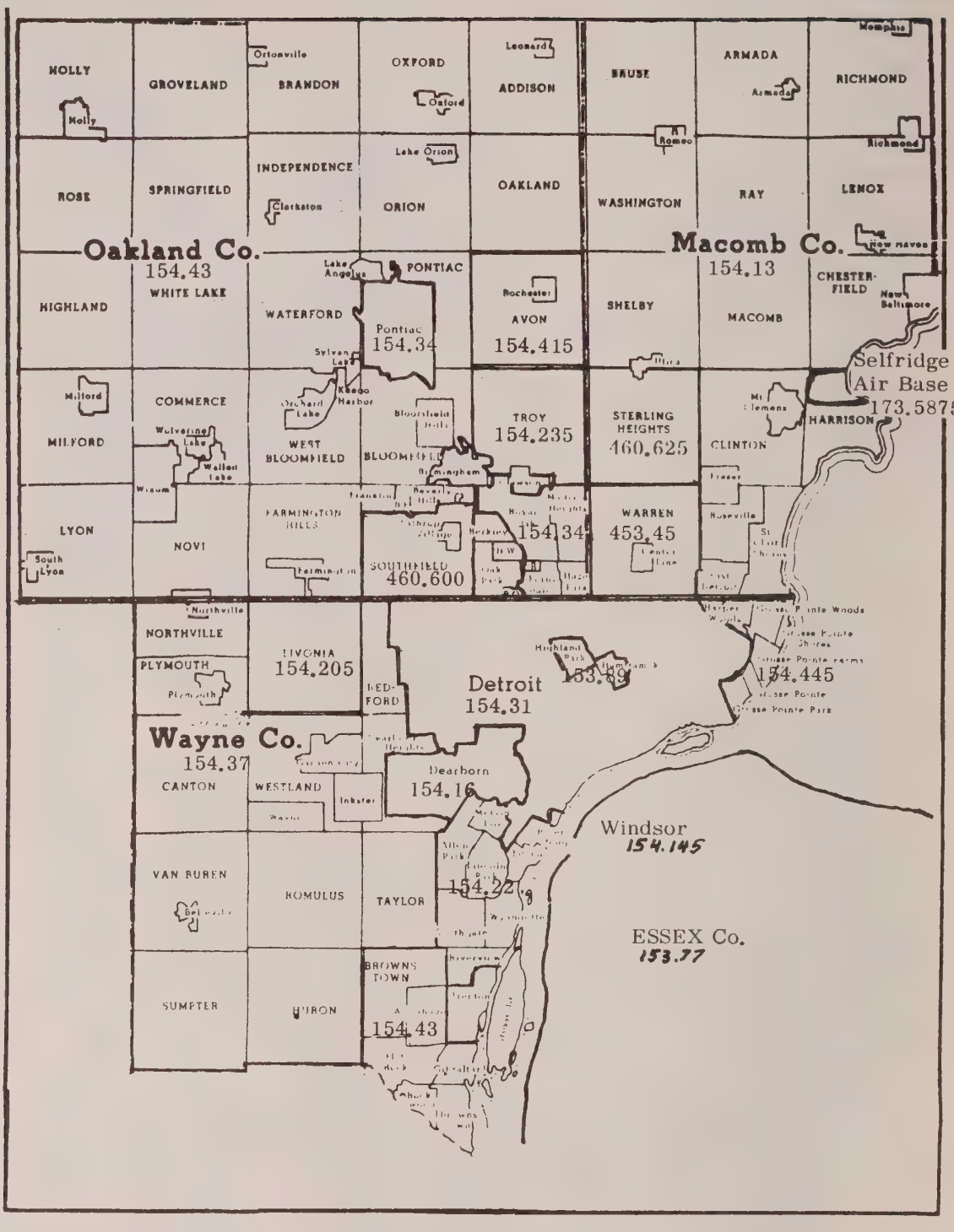
D. LAWSON MI-071



D. LAWSON MI-071

FIXED RADIO STATIONS





Oakland County Fire Departments

St.	City	154.34 Call Sign
1	Pontiac	KQF709
5	Birmingham	KQC971
6	Southfield (Mutual Aid)	
7	Madison Hts.	KJP445
8	Hazel Park	KQE958
9	Royal Oak	KQD233
11	Ferndale	KQF229

		460.600
6	Southfield	KYG527
		154.235
8	Troy	KCQ401
16	Clawson	KQG319
		154.415
	Avon Tp.	WRU797
	Rochester	KYF433
		154.43

1	Waterford Tp.	KQC357
2	Pontiac Tp.	KQC427
3	Independence Tp.	KQH448
4	Whitelake Tp.	KQD499
5	Novi	KDK655
6	West Bloomfield Tp.	K LS647
9	Tri-Cities (Keego Harbor-Sylvan Lake-Orchard Lake)	KQM626

St.	City	Call Sign
11	Farmington	KDJ576
13	Franklin	KQG259
14	Commerce Tp.	KQF907
15	Brandon Tp.	KQG353
17	Milford	KCI679
18	Bloomfield Tp.	KQJ733
20	Orion Tp.	KBC207
21	Oxford Tp.	KAP373
22	Springfield Tp.	KCN662
23	Farmington Hills	KDE251
24	Lyon Tp.	KVZ736
25	Groveland Tp.	KSP318
26	Addison Tp.	KJH621
27	Wixom	KYK492
28	Highland Tp.	KUO892

154.04

Huntington Woods (Public Service Dept.) KQH826

Pleasant Ridge servied by Ferndale

Lathrup Village servied by Southfield

Public Service Dept. Dispatch unknowen
Royal Oak Tp.
Oak Park
Beverly Hills
Berkley

Wayne County Fire Departments

	Detroit	KQA205
	base	154.31
		154.40
	mobile f-4	153.95

153.89

	Hamtramck	KCY634
	Highland Park	KQF217

154.445

	Grosse Pointe City	KDP974
	Grosse Pointe Farms	
	Grosse Pointe Park	
	Grosse Pointe Shores	
	Grosse Pointe Woods	
	Harper Woods	

154.37

St.	City	Call Sign
2	Wayne	KQB747
3	Romulus	KUZ633
4		
5	Redford Tp.	KQE911
6	Inkster	KQE214
7	Livonia (city freq. 154.205)	KFB999
8	Canton Tp.	KQE971
9		
10	Garden City	KCN831
11		
12	Dearborn Hts.	KQF504
13	Taylor	KDR372
14	Westland	KQF721
17	Northville	KKD224
	Plymouth	KDA434
	Van Buren Tp.	KZE785
	Sumpter Tp.	KYF430

154.205

	Livonia	KFB999

154.16

	Dearborn	KAT353

154.22

7	Allen Park	KDB915
8	Ecorse	KCI473
	Lincoln Park	KQE762
	Melvindale	KDN933
	River Rouge	KQF850
	Riverview	KRE518
	Southgate	KCI474
	Trenton	KXM931
	Wyandotte	KBD914
	Grosse Ile	KCY233

154.43

	Brownstown Tp.	KZF925
	Flat Rock	KQH829
	Gibraltar	KQF474
	Rockwood	KQE407
	Trenton	KXM931
	Woodhaven	KKL515

Macomb County Fire Departments

All county stations operate on 154.13 as the county fire net

St.	City	Call Sign
100	Harrison Tp.	KTI616
120		
130	East Detroit	KQD789
140	Utica	KQE449
150	Mt Clemens	KQB945
160	St Clair Shores	KQD450
170	Roseville	KQD401
180	Centerline	KQG390
190	Warren City freq. 453.450	KQD459
200	Harrison Tp.	KTI616
260		
310	Ray Tp.	KYX277
500	New Haven	KQF922
540	Shelby Tp.	KQF344
550	Macomb Tp.	KQF864
560		
570	Frazer	KQG867
580	Sterling Hts. City freq. 460.625	KSZ435
610	Armada	KLS499
630	Chesterfield Tp	KWI602
660	Romeo	KCS990
700	Bruce Tp.	KWX428
740		
860	Washington Tp.	KYR480
910	New Baltimore	KTI584
960	Washington Tp.	KCO342
	Clinton Tp.	KQF484
	Selfridge Air National Guard Base 173.5875	

Canada

Essex County, Ont. Fire Departments

All Essex county stations are dispatched from Windsor.

Essex County	153.77
Windsor	154.145
XJG97	
ch. 2	154.28
ch. 3	154.07

PUBLIC SAFETY - EAST

Send Public Safety and Special Emergency frequencies, radio system details and questions for New England, New York, New Jersey, Maryland, Delaware, Pennsylvania To:

Richard Barnett, P.O. Box 428, Newton Highlands, MA 02161.

New England

From Maurice: Hartford Connecticut Fire Department
RI-017

154.310 KCA201 Repeater and Primary Frequency
154.205 Inbound to the repeater
153.830 KNBH902 Low Power Fireground

Engine Companies #1-16
Ladder Companies #1-6

District #1 Chief - Downtown and South End of the City
District #2 Chief - North End of the City
District #3 Chief - West End of the City

Car 1 - Chief of the Department
Car 2 - Assistant Chief of Fire Suppression
Car 3 - Fire Marshal
Cars 30-39- Fire Marshal's and Fire Inspectors
Car 4 - Assistant Chief of Support Services
Car 5 - Chief of Special Services Division
Cars 50-51- Special Services Division Vehicles
Car 6 - Chief of Training Division
Cars 60-61- Training Division Vehicles
Car 7 - Master Mechanic
Cars 70-79- Machine Shop Service Vehicles
Car 8 - Superintendant of Fire Alarm and Communications
Cars 80-89- Fire Alarm and Traffic Light Service Vehicles
Car 9 - Civil Preparedness Director
Car 100 - Mayor of the City

Codes:

10-00 - Harassment, Company Leaving the Scene
10-01 - Call Headquarters by Telephone
10-02 - On the Scene
10-03 - WORKING FIRE
10-04 - Message Received
10-05 - Request Fire Marshal's Office to this Scene
10-06 - FATALITY
10-07 - Request Police to this Scene (state reason)
10-08 - In Service
10-09 - Out of Service
10-10 - Request Ambulance to Scene
10-71 - False Alarm
10-72 - Bomb Threat
10-73 - Apparatus Accident
10-96 - Apparatus Accident with Injuries

1-1-2 - 2ND ALARM--on duty shift only
2-2 - 2ND ALARM--CALL BACK OFF DUTY SHIFT
3-3 - 3RD ALARM

Warwick Rhode Island Fire Department Code

Signal 1 -False Alarm
2 -One Engine Company Can Handle
3 -Working Fire
4 -Laying Line
5 -Send in 2nd Alarm
12 -Call by Phone
14 -Injured Fireman
71 -Difficulty Breathing -severe
72 -Difficulty Breathing -cardiac
73 -Difficulty Breathing -medical
74 -Dead on Arrival
75 -Stroke
76 -Seizure
77 -Overdose

78 -Poison
79 -Diabetic
81 -Internal Illness or Injury
82 -Maternity
83 -Maternity Delivered Home or Rescued
84 -Hemorrhage -Female
85 -Emotional Problems
86 -Minor Injuries
87 -Serious Injury
88 -Severed Limbs
89 -Fractures
91 -Dislocations
92 -Neck or Back Injuries
93 -Major Burns -1st, 2nd Degree
94 -Major Burns -3rd Degree
95 -Eye Injury
96 -Undetermined Illness or Injury
97 -Contangious Disease

Before we get on to New York, I'd just like to mention that of all the six districts covered in the column, it seems that New England has the least amount of input. I was hoping that I would eventually be able to split New England into two regions -southern and northern- but with the quantity of information I receive it would be impossible. I really urge all area members to help out.

New York

From Gene (NY-110): Rockland County New York Frequencies

37.18 Is used by all county law enforcement units as a primary channel or for access to the NCIC, motor vehicle computer run by the Sheriffs Dept. All Co. Vol. Amb.Corps. It is the primary channel for the Sheriff, Villages of Suffern, Sloatsburg, Nyack, S.Nyack, Grandview, Haverstraw; Towns of Ramapo, Stony Point, Haverstraw.

37.24 Is the primary channel for Clarkstown Township They also have there own teletype. They are the only local agency besides the Sheriff to have one. The other dept.s don't even have a teletype receiver.

37.28 Orangetown Township and Village of Piermont main channel

37.40 Village of Spring Valley and some of the Town of Ramapo cars, although it is not used by the Town much.

154.89 Palisades Interstate Park Police used by both New York and New Jersey. (A Bi-State Park System). Police only work in one state.

155.475 State Police Troop F' Base to car

154.935 State Police Troop F Car to base

154.665 State Police Statewide car to car

154.695 State Police Staewide or Emergency channel

The Town of Stony Point is licensed also to operate on 37.32. They recently moved to a new station and it is reported that they use this as channel 2 but it is not confirmed. They have been licensed on this channel for years.

37.22 Used by the security force at Rockland State Hospital.

155.07 Used by the Security force at Rockland Comm. College and Letchworth Village State Hosp. (It is used by most NY State Hosp.)

Unit numbering system is done county wide except for the State Police and Palisade Park Police

All cars refer to the Sheriff's base as headquarters.

All cars with 60 and 70 series numbers are Sheriffs and other county vehicles.

Station 201 Clarkstown PD cars in the low 200's
Station 301 Orangetown PD Cars in the 300's to about 342

Car 355 is the Village of Grandview-1 man 1 car

Station 361 is South Nyack Village PD cars in 360s

Station 371 is Piermont PD cars in the low 370s

Station 381 is Nyack Village PD cars in the 380s

Station 401 is the Town of Ramapo cars in the low 400s

Station 471 is the Village of Suffern cars in the 470s

Station 491 is the Village of Sloatsburg cars 491-3

Station 501 is the Town of Haverstraw cars in the 530s

Station 551 is the Village of Haverstraw cars in the 550s

Station 601 is the Town of Stony Point cars very low 600s

Station 711 is the Village of Spring Valley

Cars in the 800s are D.A.s investigators

Station 901 is the NY Hq. of the Palisades Park PD. There cars are not numbered in any special order. they are generally referred to as B-??
New Jersey cars are J-??

Station 951 is the Town of Tuxedo located in Orange Co.

Station 961 is the Village of Tuxedo Park Located in Orange Co.

Stations 951 and 961 only use the Rockland County Freq. although they are in the next county. They are blocked in by mountains and possible do it for this reason.

Generally in the above departments the Chief of Police is known as car 200,300,400

The NY state Thruway Authority maintains its own Troop of the State Police known throughout the State as Troop T. They use 453.525. This is repeated. They all now have local troop radios but don't use them very much All Thruway operations, Police, tow trucks, and maint. use the same freq. as well as the toll booths.

If anyone has any questions please write to me
Gene C. Rosenberg PO Box 485 Rye, NY 10580 NY-110
Send a self addressed postage paid envelope for a
copy of the radio signals.

(Editor's note: I hope Gene will also send me copies of the codes so that they will be printed in a future issue. Thanks Gene!)

New Jersey

From Thomas (NJ-126): Hudson County New Jersey Police Public Safety Radios

155.730 Hudson County Police -Frequency #1- Dispatch & Sheriff's Office
155.310 Hudson County Police -Frequency #2- Mobile to Mobile

159.090 City of Hoboken -Police Dispatch
170.150 City of Hoboken -Fire Dispatch
159.090 City of Hoboken -Ambulance Dispatch
155.040 City of Hoboken -Public Works

460.375 City of Jersey City -Police- North District Dispatch
460.025 City of Jersey City -Police- South District Dispatch
460.325 City of Jersey City -Police- East District Dispatch
460.350 City of Jersey City -Police- West District Dispatch
460.600 City of Jersey City -Fire- Frequency #1
460.550 City of Jersey City -Fire- Frequency #2
155.265 Jersey City Med Cntr-Dispatch-

159.090 Township of North Bergen -Police- Dispatch
154.325 Township of North Bergen -Fire- Dispatch
170.150 Township of North Bergen -Fire- Mutual Aid
159.090 Township of North Bergen -Ambulance- Dispatch
155.340 Township of North Bergen -Ambulance- Mobile to Hospital

155.070 Town of Secaucus -Police- Dispatch
170.150 Town of Secaucus -Fire- Dispatch by Plectron
155.340 Town of Secaucus -Ambulance-

460.425 City of Union City -Police- Dispatch
159.090 City of Union City -Police- Intercity
170.150 City of Union City -Fire- Dispatch

470.3625 City of West New York -Police- Dispatch
470.3125 City of West New York -Police- Frequency #2
159.090 City of West New York -Police- Intercity
170.150 City of West New York -Fire- Dispatch

159.090 Township of Weehawken -Police- Dispatch
170.150 Township of Weehawken -Fire- Dispatch
155.040 Townwhip of Weehawken -Public Works-

159.090 Town of Guttenberg -Police- Dispatch
170.150 Town of Guttenberg -Fire- Dispatch

The following hospitals operate on 155.340MHz for hospital to ambulance communications. All Hospitals are in Hudson County.

St. Mary Hospital -Hoboken
Palisades General Hospital -North Bergen
Riverside General Hospital -Secaucus
Jersey City Medical Center -Jersey City (also 155.265)
Christ Hospital -Jersey City

Fire Departments in North Bergen, Union City, West New York, Weehawken and Guttenberg are consolidating their radio communications to form the Hudson County Fire Communications Association. Should now be in operation.

Hudson County - Unified Radio Code:

10-01	Riot	10-31	Accident; no vehicle
10-02	Assist Patrolman	10-32	Accident; vehicle
10-03	Holdup	10-33	Ambulance Needed
10-04	Holdup Alarm Ringing	10-34	Cancel Ambulance
10-05	Burglar Alarm Ringing	10-35	Assist with Carry
10-06	Homicide	10-36	Dead on Arrival
10-07	Shooting (give details)	10-37	Stolen Car Alarm
10-08	Cutting (give details)	10-38	Missing Person Alarm
10-09	Alarm of Fire	10-39	Car Check (registration)
10-10	Entry (say of in progress)	10-40	No Report on Stolen Car
10-11	Call Your Command	10-41	Tampering with Auto
10-12	Report to Your Command	10-42	Wanted Alarm (car/person)
10-13	Call Dispatcher by Phone	10-43	License Plate lost/stolen
10-14	Acknowledge	10-44	Dangerous Condition
10-15	Repeat Your Message	10-45	Family Dispute
10-16	Stand-by	10-46	Fire Hydrant Open
10-17	Report on Signal	10-47	Fire Hydrant Blocked
10-18	Out of Service	10-48	Driveway Blocked
10-19	Back in Service	10-49	Mail
10-20	Arrive at Scene /location	10-50	Transportation
10-21	Gone on Arrival	10-51	Animal Complaint
10-22	No Police Action Needed	10-52	Utility Call (gas, water, etc.)
10-23	Condition Corrected	10-53	Investigate
10-24	Referred to Court	10-54	Notification
10-25	Arrest: Prisoner to HQ	10-55	Wrecker Required
10-26	Escort	10-56	Sick Person
10-27	See Complainant	10-57	Other Parking Complaint
10-28	Disorderly (give details)	10-58	Recover Stolen Vehicle
10-29	Intoxicated Person	10-59	Noise Complaint

From Steve (NJ-049):

STATE POLICE EMERGENCY NETWORK
SPEN SYSTEM

SPEN 1 154.68 available to every Law enforcement agency in the state. including all Federal,Military,State,County,Local departments.

SPEN 2 155.475 Nationwide Police Emergency Frequency.For communicating with mobile units from other States,neighboring States base stations, and for New Jersey vehicles traveling out of state.Also if SPEN 1 is in local use,SPEN 2 to be used. New Jersey is supplying 2 channel base stations on SPEN 1/Spen 2. These are low power so towns do not interfer with other agencys. Mobile units supplied are 4 channel.There will be available for temporary assignment additional portable base stations on SPEN 3/4

The Statewide Control Cenetr will operate high powered base stations on all channels, Control Centers will be the State Police Troop Headquarters located thru out the State.

SPEN 3 154.725 for use during non-emergency activities between two or more agencies who do not share a common radio channel

SPEN 4 153.785 for use by eligible public safety,agencies, fire,EMS, civil defence .Primarily as a coordinative, special purpose direct intercommunications between State, County, Municipal public safety agehcies.

If a County or Local agency want to use a base station on SPEN 3/4 they may at there own exspense and with approval from the State

The plans call for in the future for every police car in the state to have a SPEN radio! For the time being only certain agencies have SPEN mobiles and Base statioms. Installation has begun as of August .

BERGEN COUNTY , Hackensack, New Jersey

county wide alert KEA334

37.38 Sheriff investigators
Prosecutor office, Detectives/investigators

37.40 Ch. 2 Prosecutor office/Sheriff
Car to Car

37.34 Ch. 2 Prosecutors office; certain units like
Arson team for Car to Car

154.80 Sheriffs Office, mobile/portables
in Jails, county court house

155.55 Ch. 1 Prosecutors Narcotic Task Force
Ch, 2 car to car
156.15 input to Ch. 1 (no repeater)

155.37 Ch. 3 car to car/surveilance.
155.73 Ch. 4 " "
Ch 3 & 4 are also local police channels used within the county. Channels are used out of county or with the various local Departments

477.1625 Ch. 1 County Police KXY 614/KEA 334
" Ch. 2 Car to car
477.1875 Ch. 3 County wide alert/inter-system
to replace 37.38 alert in 1982
477.2125 Ch. 4 Tactical- mobile repeater
inputs to Ch. 1,3,4, 3 MhZ higher

The county Police dispatch all units except the narcotic task force. on 37.38 the county broadcasts one way alert messages to all towns (70 towns, 69 local departments, 2 state agencies, 1 interstate/Port authority). Messages such as Hold Ups, pursuits, stolen property, etc. by means of tone alert receivers The County police also monitor certain local frequencies. If a Town needs to get in touch with the county they would push a tone alert button that opens up the county recevier.

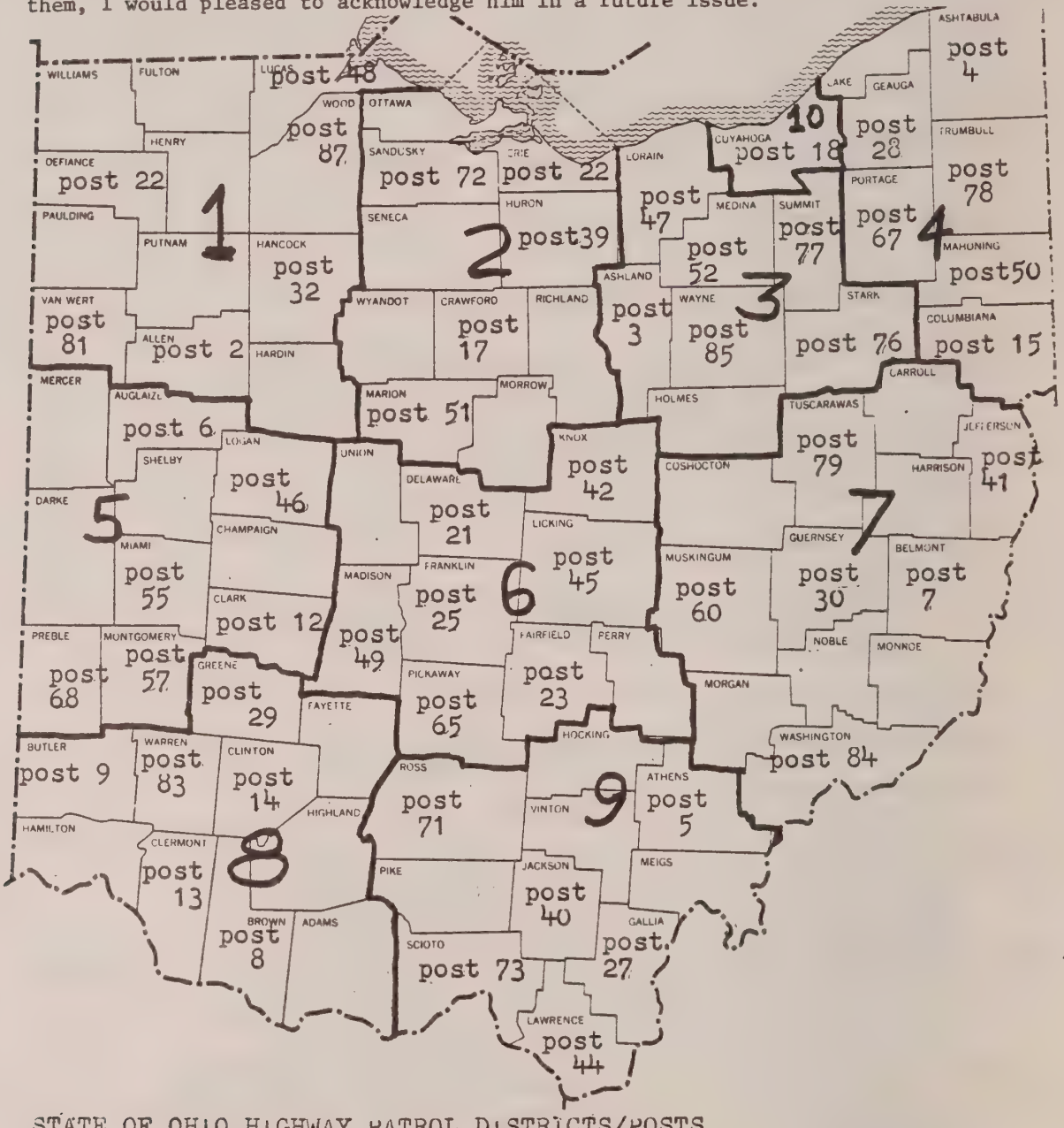
In 1982 477.1875 will replace the low band system. It provides a base/control station in all State, adjacent County, local, some out of State, county, local, departments with direct communications. (new yourkcity, state, some counties). There will also be mobile and portable radios instaled in certain vehicles.

The County Police are also part of the State Wide Radio system called SPEN SPEN is now going in to limited service state wide , and will be completed by the end of 1982.

Spen 1 154.68 and Spen 2 155.475

Pennsylvania-Ohio

I am not sure whether or not the following two maps have been seen before in my column, however due to an Ohio member's request that I highlight his state more often, I felt it would be appropriate to print such important maps. I really have not received all that much information from Ohio -maybe it's getting lost in the mail- and thus I hope all Ohio members will be conscious to submit data so that their state will be seen more often. I apologize, I lost the name of the member who contributed the following maps. If he would like to write in concerning them, I would pleased to acknowledge him in a future issue.

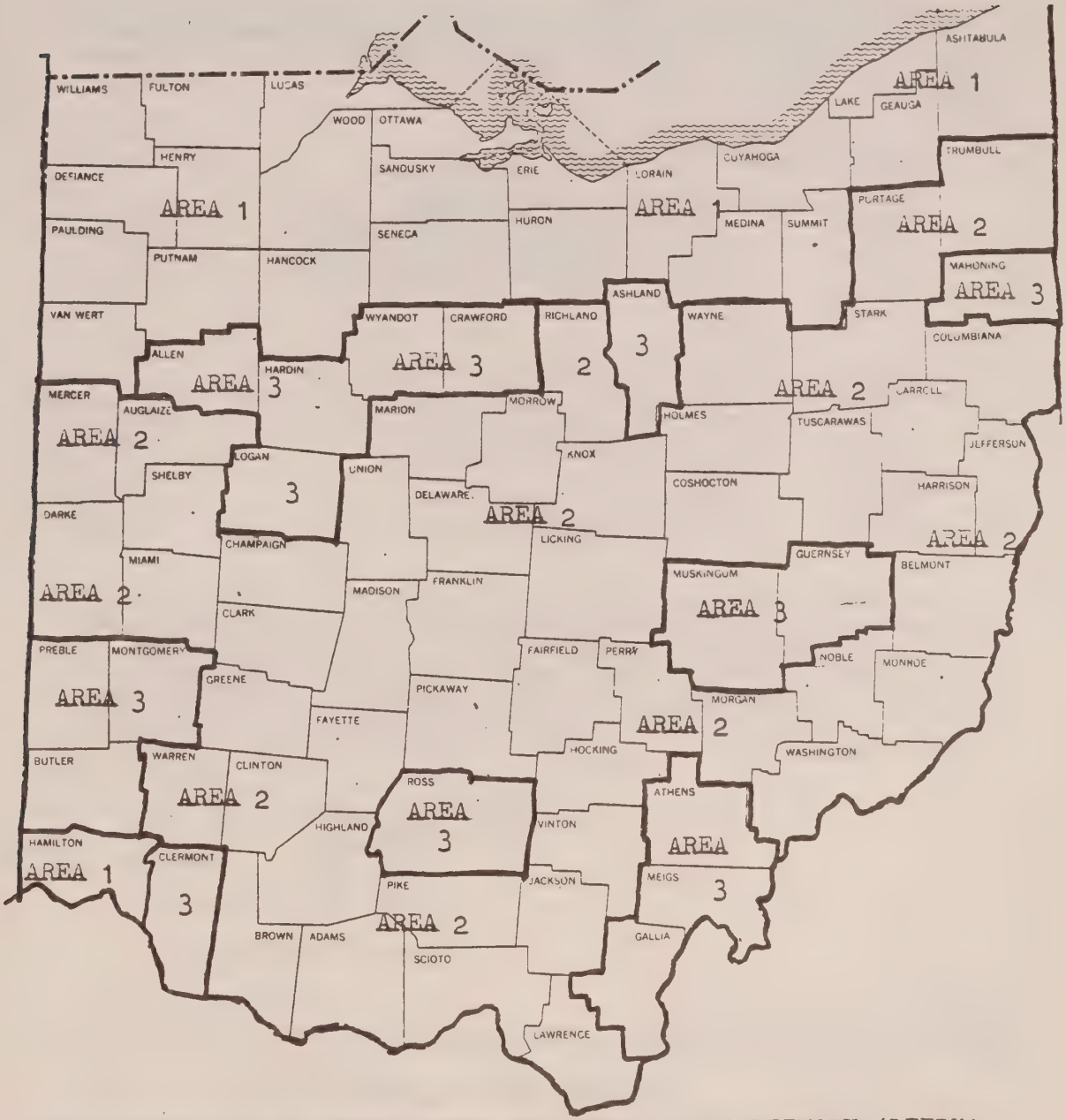


STATE OF OHIO HIGHWAY PATROL DISTRICTS/POSTS

District	Frequency	Assignment
1,6,7	44.940 Mhz	main dispatch/base
	45.260	main dispatch/mobile
2,4,8	44.980	main dispatch/base
	44.820	main dispatch/mobile
3,5,9,10	44.740	main dispatch/base
	44.860	main dispatch/mobile
Statewide	45.020 Mhz	main intersystem/radar,aircraft/base,mobile
	45.100	back-up intersystem/special operations b/m

District Intersystems: all freq.listed to Columbus

1,3,9	42.560 Mhz
2,4,8	45.860
5	42.080
6,7	42.420
3	45.140



OHIO STATEWIDE LAW ENFORCEMENT EMERGENCY RADIO NETWORK (LEERN)

Used by all police departments for emergency interagency communication. The Highway Patrol has both base and mobile operation. All others are mobile only,100 watts each. (simplex)

AREA	LEERN FREQUENCY
1	154.935 Mhz
2	154.680
3	both channels

DEAR RICHARD:

THIS IS THE FIRST TIME I HAVE SENT IN ANYTHING FOR YOUR COLUMN AND HOPE THAT IT WILL BE OF SOMETHING DIFFERENT THAN WHAT USUALLY APPEARS.

FROM THE ROYAL OAK AREA OF MICHIGAN (JUST NORTH OF DETROIT) I WILL, AT TIMES, HEAR KELLY'S ISLAND AND PUT-IN-BAY IN LAKE ERIE. HAVE GIVEN THOUGHT BEFORE OF PUTTING THESE IN THE NEWSLETTER BUT THERE IS ALWAYS SOMETHING THAT COMES UP, WHICH WE ALL HAVE AT TIMES.

KELLY'S ISLAND:

39.240	VILLAGE OF KELLY'S ISLAND POLICE	KXG-821
39.440	VILLAGE OF KELLY'S ISLAND POLICE	KXG-821
39.580	VILLAGE OF KELLY'S ISLAND POLICE	KXG-821
39.720	VILLAGE OF KELLY'S ISLAND POLICE	KXG-821

PUT-IN-BAY ISLAND:

39.420	VILLAGE OF PUT-IN-BAY POLICE	KUG-586
39.460	VILLAGE OF PUT-IN-BAY POLICE	KUG-586
39.580	VILLAGE OF PUT-IN-BAY POLICE	KUG-586
39.660	VILLAGE OF PUT-IN-BAY POLICE	KUG-586
151.715	VICTORY CAB, INC.	KWZ-844
155.340	VILLAGE OF PUT-IN-BAY HOSPITAL	WRU-864
151.655	PARKER BOAT LINE, INC.	KQI-747

WE HAVE A NORTHERN HOME ON LAKE HURON IN THE THUMB OF MICHIGAN AND I WILL BE THERE STARTING THE MIDDLE OF THIS MONTH. THE SASE ENCLOSED IS FOR THAT ADDRESS, IN CASE YOU WANT TO DROP A LINE. IF YOU ARE IN NEED OF ANYTHING ELSE FROM OHIO, LET ME KNOW. I DO HAVE MICROFICHE FOR THE ENTIRE COUNTRY AND CAN HELP YOU IDENTIFY STATIONS THAT ARE DIFFICULT IT IDENTIFY.

REGARDS,

Larry

LARRY A. SMITH (MI-001)

R.C.M.A. PRESIDENT

Delaware, D.C., Maryland, Virginia, West Virginia

MARYLAND EMSCS FREQUENCY PLAN

(Including the District of Columbia and Northern Virginia)

TONE CODE A - 127.3 Hz

Allegany	MED-7, (1,5,8)
Calvert	MED-3, (4,5,8)
Montgomery:	
Holy Cross Hospital	MED-2, (5,6,8)
Mont. Gen'l Hospital	MED-5, (1,2,8)
Suburban Hospital	MED-2, (1,5,8)
Worcester	MED-4, (2,6,8)
Talbot	MED-1, (3,7,8)

TONE CODE B - 146.2 Hz	
Cecil	MED-5, (3,7,8)
Frederick	MED-6, (2,4,8)
Garrett	MED-3, (4,7,8)
Prince George's: Dist.Hts.	MED-1, (5,7,8)
Greenbelt Aux	MED-1, (5, 8)
Cheltenham Base	MED-7, (1,5,8)
St. Mary's	MED-4, (1,2,8)
Wicomico	MED-2, (1,6,8)

TONE CODE C - 167.9 Hz	
Arlington, Virginia	MED-7, (5,6,8)
Charles	MED-8, (1,5,7)
Dorchester	MED-5, (3,7,8)
Kent-Queen Anne's	MED-6, (1,3,8)
YSCOM	CALL Channels Only
Washington County	MED-1, (2,6,8)

TONE CODE D - 192.8 Hz	
District of Columbia	MED-3,6,8,(1,2,4,5,7)

TONE CODE E - 136.5 Hz	
Alexandria, Virginia	MED-5, (3,4,8)
Prince William, Va.	MED-1, (4,6,8)
Ft. Meade	CALL-2 Only
Ft. Ritchie	CALL-2 Only
Aberdeen Proving Ground	CALL-2 Only

TONE CODE F - 156.7 Hz	
Fairfax, Virginia	MED-4, (5,7,8)

TONE CODE G - 131.8 Hz	
Loudoun, Virginia	MED-3, (4,6,8)

METROPOLITAN BALTIMORE (No Tone Code)	
Baltimore City	MED-2, (3,4,7,8)
Anne Arundel, Baltimore, Carroll, Harford and Howard Counties	MED-4, (8)

FREQUENCIES (Base/Mobile) (MHz)

CALL-1	462.950/467.950
CALL-2	462.975/267.975
MED-1	463.000/468.000
MED-2	463.025/468.025
MED-3	463.050/468.050
MED-4	463.075/468.075
MED-5	463.100/468.100
MED-6	463.125/468.125
MED-7	463.150/468.150
MED-8	463.175/468.175

NOTES

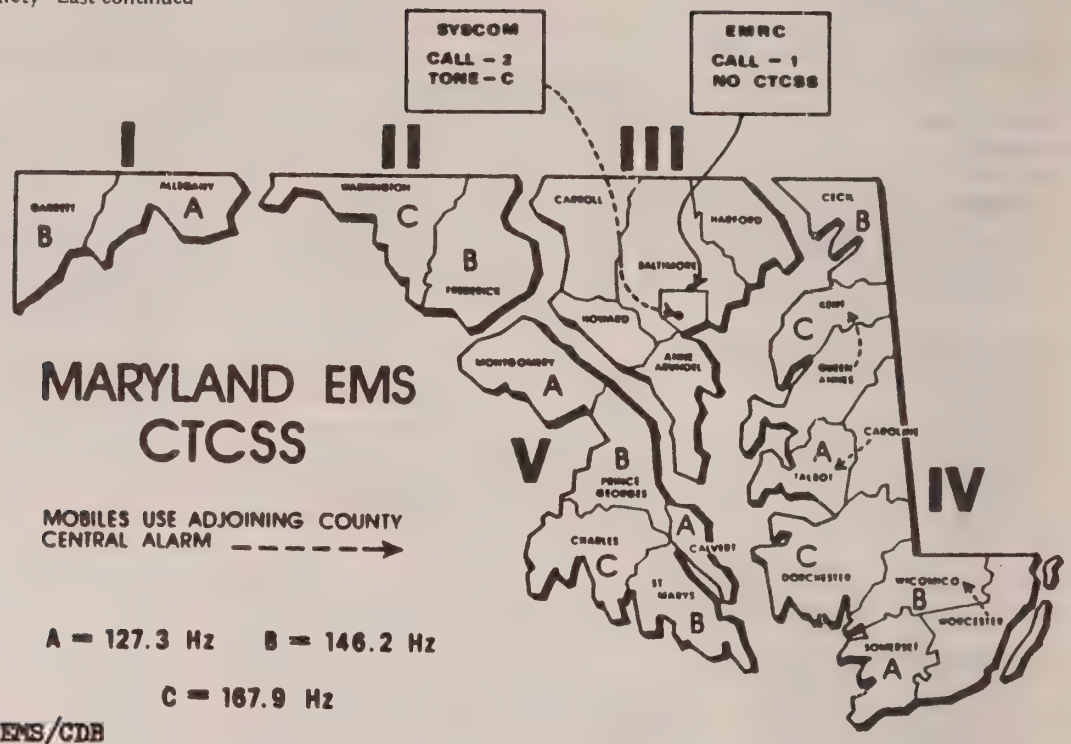
(1) Unless otherwise stated, all references are to Maryland County base station locations.

(2) Primary channel assignments are shown first; secondary channel assignments in parenthesis.

(3) CALL-1 and CALL-2 implemented everywhere in Maryland except Metropolitan Baltimore, where only CALL-1 will be implemented.

(4) Metropolitan Baltimore portables will have CALL-1 and MED-2,3,4,7 and 8.

(5) CALL-1 operates with "noise" or "open" squelch, i.e., no tone code.



Once again I could not find the name of the member who submitted this excellent work from Maryland. I apologize and again ask that person to write me so that I can extend credit in a future issue. It would be helpful though if everyone could just jot down his name and membership number on each sheet he sends so that this won't happen again.

The Carolinas, Florida and Georgia

From Maurice once again: Charlotte North Carolina Police & Fire

453.300	Adam-3 Police Team	453.800	Baker-1 Police
453.450	County Police #1	453.850	County Police #2
453.500	Baker-2 Police	453.900	City Police Channel 5
453.700	City Investigations	453.950	Division of Motor Vehicles Ch.6
453.750	Sheriff	155.190	Intercity Police

460.525 City Fire Channel #1
460.625 City Fire Channel #2
460.550 City Fire Channel #3
460.600 City Fire Channel #4
460.575 City Fire Channel #5
33.940 Mecklenburg County Fire

Charlotte City Fire 10-Codes:

10-01	Signal Weak	10-13	Existing Conditions
10-02	Signal Good	10-14	Information
10-03	Stop Transmitting	10-15	Message Delivered
10-04	Affirmative	10-16	Reply to Message
10-05	Relay	10-17	Enroute
10-06	Busy	10-18	Urgent
10-07	Out of Service	10-19	In Contact
10-08	In Service	10-20	Location
10-09	Repeat	10-21	Call by Phone
10-10	Negative	10-22	Disregard
10-11	On Duty	10-23	Arrived at Scene
10-12	Stand-by	10-24	Assignment Complete

10-25 Report to or Meet
10-26 ETA
10-27 License/ Permit Information
10-28 Ownership Information
10-29 Records Check
10-30 Danger/ Caution
10-31 Pick-up
10-32 Units Needed Specify
10-33 Emergency
10-34 Time
10-40 Silent Run
10-41 Beggining Tour of Duty
10-42 Ending Tour of Duty
10-43 Information
10-44 -Reserved-
10-45 Dispatch Supply Truck
10-46 Dispatch Gasoline Truck
10-47 Dispatch Mechanic
10-49 Traffic Signal Out
10-50 Accident -pd=property/pi=injury
10-51 Dispatch Wrecker
10-52 Dispatch Ambulance (fireman)
10-53 Dispatch Ambulance
10-54 Dispatch Police
10-55 Dispatch Police Report to OIC
10-56 Dispatch Police 1 Car (Emergency)
10-59 Convoy Escort
10-60 Dispatch Fire Investigator
10-61 Dispatch Police Investigator
10-65 Dispatch Assistant Chief
10-70 Fire Alarm
10-71 Report Condition at Fire
10-72 Area Survey
10-73 Smoke Report
10-74 Returning to Station in Service
10-75 Returning to Station out of Svc.
10-76 Unlawful Alarm
10-78 Dispatch Assistance
10-79 Dispatch Coroner
10-85 Recall for Second Alarm
10-86 Recall for Third Alarm
10-87 Bomb Scare
10-96 Mental Subject

Charlotte Medic 10-Codes:

10-00 Caution
10-01 Signal Weak
10-02 Signal Good
10-03 Stop Transmitting
10-04 Affirmative
10-05 Relay
10-06 Busy
10-07 Out of Service
10-08 In Service
10-09 Repeat
10-10 Meal
10-12 Stand-by
10-13 Weather
10-14 Scheduled Transport
10-15 Non-Emergency Traffic
10-16 Emergency Traffic
10-17 Personal Item
10-18 Urgent
10-19 Return to
10-20 Location
10-21 Call by Phone
10-22 Disregard
10-23 Arrived at Scene
10-24 Assignment Complete
10-25 Report to
10-26 Mechanical Difficulty
10-27 Gas Needed
10-28 Supplies Needed
10-29
10-30 Improper Use of Radio
10-31 Pick-up
10-32 Units Needed
10-33 EMERGENCY
10-36 Time
10-40 Fight
10-41 Begin Tour of Duty
10-42 End Tour of Duty
10-43 Information
10-44 False Alarm
10-45 Non-Transport
10-46 Transported by Other
10-47 Transported
10-48 Gone on Arrival
10-49 MCAS Not Needed
10-50 Accident
10-51 Wrecker Needed
10-52 Ambulance Needed
10-53 Road Block at
10-54 Dispatch Police
10-55 Drunk Driver
10-56 Drunk Pedestrian
10-57 Dispatch Fire
10-58 Notify Shift Supervisor
10-59 Convoy or Escort
10-60 Charlotte Community Hospital
10-61 Charlotte Memorial Hospital
10-62 Presbytarian Hospital
10-63 Mercy Hospital
10-64 Orthopedic Hospital
10-65 EENT Hospital (?)
10-66 Huntersville Hospital
10-67 Lorance Hospital
10-68 Request Physician
10-69 Request Helicopter
10-71 CLSC Base
10-73 Headquarters
10-74 Negative
10-75 Duty Station
10-76 Enroute
10-77 ETA
10-79 Notify Medical Examiner
10-80 Morgue
10-81 Pt. Request
10-86 Prepare to Write
10-87 Bomb Scare
10-91 Domestic Trouble
10-94 Man with Gun
10-96 Mental Subject
10-100 Nature Break (Never seen that one!!)

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photo department

Send photographs of custom monitor listening posts, unusual or extensive monitor or two-way antenna systems, user station consoles (PD, Fire, Paramedics, etc.) or other monitor/two-way related equipment of interest. Photographs must be 3 x 5 inches or larger, black-and-white with good contrast, sharply focused and attractively composed. Each photo must be accompanied by details and explanations of equipment. Photos will not be returned. If you have questions, write first and please include an SASE. Send photos or write to:

The monitoring post shown below is the effort of RCMA Member Dave Phebus (IN 051), of Goshen, Indiana. Dave, I'm not the Photo Column Editor, but I'll try to do justice to the copy you sent in.

This photograph shows the upper part of the station. In the small shelf unit (from left to right), there's a digital clock; next to that is a Regency C1WA Weather Alert radio. Below (left) to right) is a Bearcat III L/H crystal-controlled scanner. And next to that is a Realistic PRO 4-A V.H.F. Hi hand held unit.

Dave writes, "I have the unit propped up on a calculator stand. When not using a hand-held unit, I find that it's a good idea to put it on something like a calculator stand. That way, it can be displayed and I don't need to worry about it getting knocked over."

Next to the small shelf unit is a Longines Symphonette multi-band radio which receives AM, FM, 3 shortwave bands, VHF low and high, and aircraft. It operates on AC or batteries. Below that is a Regency K100 programmable scanner.

"Since I live in an apartment," Dave continues, "I currently use telescopic antennas. On the Bearcat and Regency units, I use Radio Shack's VHF Hi-Lo Indoor (center loaded) telescopic antennas. I have the go-ahead from the landlord to put an antenna on the roof, and I'll probably do that this summer." (That should be about the time this is published, Dave.)

Sitting on top of the Bearcat unit is a memo book that lists 10 codes and signals for local, county, and state police departments. There's also an "at-a-glance" list of Dave's favorite freqs for his K100.

Not shown is a bottom shelf holding three boxes. One contains log sheets, directories, equipment manuals, correspondence, notes, etc. "By keeping them in a box," Dave explains, "I can keep track of these items." In the next box are his RCMA issues, and in the last are Dave's accessories for his hand-held unit.

Thank's very much, Dave. For Dave and others interested in this column, we should have an editor by the next issue.

Carol Ruth
RCMA Editor

Railroads

Gary L. Sturm and
Bill Farmer, Editors

Send information about railroad frequencies and their uses, railroad radio system details, and related questions to:
Gary L. Sturm, 48781 Denton Rd., Apt. 37, Belleville, MI 48111.

Starting with this issue we will be covering the Chicagoland railroad frequencies. Chicago is still the hub of railroad activities although mergers have taken their toll on the number of railroads serving the Windy City. Since so many railroads need be listed we will divide the article into two issues.

Amtrak

160.245	Police
160.305	Commissary
160.740	Shops
161.265	Car Department
161.325	Maintenance of Way

Atchison, Topeka & Santa Fe

160.650	Road #1
160.560	Road #2
161.010	Maintenance of Way
160.560/161.490	PBX
160.860	Corwith Yard
160.785	Corwith Hump
161.205	Police
161.385	Piggyback Ramp
159.705	ATSF Trucking

Belt Railway of Chicago

160.500	Road & Dispatcher
160.380	Yard
160.695	Maintenance of Way
161.445	Police
160.965	Clearing Yard Hump

Burlington Northern

161.100	Road
161.160	Yard
160.425	PBX
160.605	Clyde Yard Hump
160.335	Clyde Yard Car Department
452.900/457.900	Union Station Diesel Shops

Chessie System (B&O, C&O, B&OCT)

160.230	Road #1
160.320	Road #2
160.290	Barr Yard
160.740	Barr Yard Car Department & Piggyback Ramp

Chicago & Illinois Western

161.280	Switching

Chicago & North Western

160.890	Road
160.455	Yard
161.040	Commuter Operations
452.825/457.825	Police
160.575	Proviso Yard
161.175	Piggyback Ramp

Chicago Shortline

160.335	Switching

Chicago, South Shore & South Bend

161.355	Road & Repeaters
161.010	Switching
161.025	ICG Commuter Trackage

Chicago, West Pullman & Southern

160.215	Switching

Conrail

160.800	Road #1
161.070	Road #2
161.130	Maintenance of Way
160.710	Signal Department
160.680	Police: Car-to-Car Channel 3
160.545	Police: Base-to-Car Channel 4
161.535/160.545	Police: Portable Repeater Link
160.245	55th Street Yard Car Department

Grand Trunk Western

160.590	Dispatcher & Road
160.530	Road
160.845	Yard
160.950	Maintenance of Way
160.755	Police

Illinois Central Gulf

161.190	Road #1 (ex-Illinois Central)
160.920	Road #2 (ex-Gulf, Mobile & Ohio)
161.025	Commuter Operations
161.190	Markham Yard North Hump
161.295	Markham Yard South Hump
161.205	Police
161.505	Markham Yard
161.460	Markham Yard Car Department
160.815	Markham Yard Locomotive Shops

We'll continue the Chicago listing in the August Issue.

The following article on BART by Greg (member number unknown) was forwarded to us by the editors of the Public Safety-California column.

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT (BART) on January 17, 1979 suffered a fire in the Transbay Tube (TBT) which connects San Francisco to Oakland under San Francisco Bay. As a result of this incident a Board of Inquiry was called. Some of the recommendations made by this Board in the area of radio communications were:

1. TBT radio communications equipment should be modified to permit operation of fire department portable radios in the TBT, as well as other BART subway areas.

2. Train operators, line supervisors, line electronic technicians, and operators of emergency vehicles should carry portable radios on the train frequency.
3. Obtain additional radio channels for BART train operations.
4. Modify the present system to permit train operators to hear both sides of train radio conversations.
5. A study should be made of the BART communications system to insure its adequacy and capability during emergencies.

In fairness to BART, many of these shortcomings were well known to them from the first day of operation. It is my understanding that BART was one of the first rapid transit operations to secure the use of Railroad Radio Service frequencies from the FCC, and this was just one channel (160.860). In later years, 160.410 and 161.355 had been cleared as indicated in the AAR's Radio Frequency Assignment Plan of 1979.

In response to recommendations 2, 3, 4 and 5 above, BART has purchased multichannel portable radios for train operators and other mainline personnel. These radios are 6 watt GE MPR Series portables operating as follows:

Channel	Transmit	Receive	Current Use	Future Use
One	161.505	160.410	Administrative	Train Radio
Two	160.860	160.860	Train Radio	Administrative
Three	160.455	160.455	Yard	Yard

Radios are issued to personnel as they report for duty and include the usual leather case, waist carrying belt and remote speaker/microphone configuration. An interesting feature is the "emergency situation switch" mounted on the top plate of the radio next to the antenna. When activated, a coded signal identifying the radio transmitting will alert Central of a direct threat to the user's personal safety.

By the time you read this, Concord Yard and Richmond Yard will have yard frequency, Channel Three, base stations in operation and Hayward Yard will be using a portable until its base station is installed.

Currently Channel One, the Adminstrative frequency, provides coverage on the Concord Line, Concord Shops and the Lake Merritt Headquarters area. In a year or so, Channel One will become the primary train radio frequency systemwide and will feature for the first time on BART a repeatered simulcast arrangement allowing all trains to hear every transmission on the train radio system.

With the conversion of Channel One to train radio operation, Channel Two will become the Administrative frequency and will continue to provide paging service systemwide. I am sure all train operators will enjoy the new train radio system without the earache of paging tones. Channel Two will also allow such activities as emergencies, after all that is what started all this stuff, to be removed from the train radio system and allow the remainder of the system to operate without the burden of emergency traffic. It is assumed that at such time as Channel One is fully operational as the train radio frequency all the "A" cars will be re-crystalled from Channel Two to Channel One.

Recommendation 1 above, has resulted in the development of a system that is soon to be adopted on a statewide basis for fire services involved with rapid transit operations. More information to follow when formally ratified.

—Gregory C. Currivan, 3/82

This column is for the exchange of space communications systems (manned or unmanned), frequency information, orbital data, hobby receiving equipment and antennas. Questions and column input pertaining to Space Communications Monitoring should be sent to:

Larry Van Horn (TN-014),1111 N. Carrier Pkwy., B-107, Grand Prairie, Texas 75050.

Welcome again to another edition of the Space Communications column. This month I will continue with our beginners series on space communications basics. This month a Radio Astronomy frequency allocation and general space communication frequency allocation table is on tap. So without further ado.....

Radio Astronomy

For those of you who might have a passing interest, certain frequency bands are authorized for Radio Astronomy. The following is a summary of those bands:

2495-2505 Khz.	24.99-25.00 Mhz.	2690-2700 Mhz.
4995-5005 Khz.	37.75-38.25 Mhz.	4.99-5.00 Ghz.
9995-10005 Khz.	73.00-74.60 Mhz.	10.6-10.7 Ghz.
14.99-15.01 Mhz.	404 - 410 Mhz.	15.3-15.4 Ghz.
19.99-20.00 Mhz.	1400 - 1427 Mhz.	19.3-19.4 Ghz.
21.85-21.87 Mhz.	1660 - 1670 Mhz.	31.3-31.5 Ghz.
		88.0-90.0 Ghz.

I have no claim as to the completeness or accuracy of the above list or the general satellite/space allocation table enclosed with this column. If you have any additions, corrections, and/or deletions please send them, and i will include them in a few months. Also WARC-79 made some dramatic changes in the space communications frequency authorizations. If you have any or all of the changes, I would appreciate receiving them. I will pass them on to all of our hobbyist in the future to get a better feel for our future space communication authorizations.

All of you might have noticed the higher frequency ranges given as compared to the average coverage of our scanners. We all must realize that communications in general is growing. As communications grows the need for additional, more productive frequencies will grow. This need will force frequencies in use ever higher, and the use for satellites as a medium will proportionatley, increase.

Notice if you will the new WARC-79 Amateur Satellite frequency allocations published in the June, 82 Space Comm Column (SCC). The move to these higher frequencies is quite evident in these new allocations. Expect to see this more the trend of the future with services like aero comms, marine, military, and business communications leaving the terrestrial systems and going to satellites. If we are to enjoy the future, we all must experiment and study these higher frequencies. The future will belong to those who experiment and get actively involved in new space communications technology.

Latest Space Object Box Score

To give all our readers an idea of the magnitude of the number of objects in space, periodically I will enclose the latest space object box score from the NASA Satellite Situation Report. This feature will appear every two months as data is made available to me. This data is current as of 2400z on 28 Feb 82:

	Objects in orbit	Decayed Objects
Australia	1	1
Canada	9	Ø
Czech	Ø	1
ESA	13	Ø
ESRO	Ø	1Ø
France	32	49
France/FRG	2	Ø
FRG	6	6
India	5	-4
Indonesia	2	Ø
International Telecommunications Satellite Organization (ITSO)	24	Ø
Italy	1	4
Japan	42	16
NATO	5	Ø
Netherlands	Ø	4
PRC	8	24
Spain	1	Ø
US	2697	2262
USSR	1786	6054
Total	4643	8443 ++ 13,086

Salyut 7

The Russians have launched Salyut 7, the successor to Salyut 6(the most successful space station in history). Early monitoring efforts pin this Salyut Salyut down as the fifth in the civilian Salyut space stations. Watch for CW activity on 15.008 Mhz.

Next Month

Well so much for this month. Hope you all have enjoyed it. Next month the beginners basic will have a Satellite Glossary. Anyone catching Space Shuttle comms or Salyut/7/Soyuz 41 comms be sure to drop the column a line and let us know of your efforts. Also anyone that has any space communications on cassette tape I would appreciate it if you could send it along. I would like to build up a library of space comm sounds and conversations to share with others interested. I will be more than happy to pay the postage both ways., so start those tapes a comin. See you all next month.

FREQUENCY ALLOCATION CHART

FREQUENCY RANGE (Mhz.)			USER	USE
2.501	-	2.502	G/NG	Secondary use, Space Research Service(abbreviation-SRS)
5.003	-	5.005	G/NG	Secondary use, Space Research
10.003	-	10.005	G/NG	Secondary use, Space Research
15.005	-	15.010	G/NG	Secondary use, Space Research
18.052	-	18.068	G/NG	Space Research Service
19.990	-	19.995	G/NG	Secondary use, Space Research
20.000	-	20.010	G/NG	Secondary use, Space Research
25.005	-	25.010	G/NG	Secondary use, Space Research
25.600	-	26.100	G/NG	International Broadcasting: proposed Direct Broadcast Satellite Band.

30.005 - 30.015	G/NG	Secondary use, SRS: Space-Earth
39.986 - 40.020	G/NG	Secondary use, SRS: Space-Earth
40.980 - 41.015	G/NG	Secondary use, SRS: Space-Earth Note 1
117.975 - 123.0875	G/NG	Space Communication Techniques authorized for Aero Service.
123.5875 - 136.000	G/NG	See 117.975-123.0875 for use.
135.000 - 138.000	G/NG	Telemetry/Tracking, Meteorological (METSAT) satellite, Space-Earth.
138.000 - 144.000	G	Satellite Mobile, Both Ways.
148.000 - 149.900	G	Telecommand: Earth- Space.
149.900 - 150.050	G/NG	Radio Navigation Satellites
154.200	G/NG	Telecommand: Earth-Space.
157.3125 - 157.4125	G/NG	Maritime Safety & Distress SATS.
161.9125 - 162.0125	G/NG	Maritime Safety & Distress SATS.
235.000 - 328.600	G	Communication tactical/nautical Satellite Mobile: Both Ways.
335.400 - 399.900	G	See 235.000 - 328.600 for use.
399.900 - 400.050	G/NG	Telemetry/Tracking: Space-Earth.
400.050 - 400.150	G	Standard Frequency. Radio NAVSAT
400.150 - 402.000	G/NG	Telemetry/Tracking: Both ways Note 2.
402.000 - 403.000	G/NG	METSAT's: Earth- Space.
406.000 - 406.100	G/NG	Satellite Mobile: Earth-Space.
449.750 - 450.250	G/NG	Telecommand: Earth-Space.
460.000 - 470.000	G	Secondary use, Earth Exploration Satellite Service: Both Ways.
620.000 - 790.000	NG	Broadcast Satellite Service.
806.000 - 890.000	NG	Mobile Satellite Service.
900.000 - 960.000	G/NG	Secondary use, Space Research.
1215.000 - 1300.000	G	Secondary use, Radio NAVSAT's.
1427.000 - 1429.000	G/NG	Telecommand: Earth-Space.
1525.000 - 1535.000	G/NG	Secondary use; Earth Exploration Satellite Service. Telemetry/ Tracking.
1535.000 - 1542.500	G/NG	Maritime Mobile Satellite Service
1542.000 - 1543.500	G/NG	Maritime/Aero Mobile SAT. Svc.

FREQUENCY RANGE (Mhz.) Ghz. above 2500 Mhz.	USER	USE
1543.500 - 1558.500	G/NG	Aero Mobile Satellite Svc.
1558.500 - 1636.500	G	Possible Navigation Satellites
1636.500 - 1644.000	G/NG	Maritime Mobile SAT Svc. Earth-Space
1644.000 - 1645.000	G/NG	Aero Mobile Satellites. Earth-Space.
1645.000 - 1660.000	G/NG	Aero Mobile Satellites. Earth-Space.
1660.000 - 1700.000	G/NG	Meteorological Satellites. Space-Earth.
1700.000 - 1710.000	G/NG	SRS(telemetry & tracking). Secondary: METSATS. Space-Earth.
1770.000 - 1790.000	G/NG	Secondary: METSATS.
2290.000 - 2300.000	G/NG	Space Research. Space-Earth. telemetry & tracking in deep space.
2.500 - 2.690	NG	Broadcast/ Fixed Satellites Both Ways.
3.100 - 3.300	G	Secondary: Radio Navigation Satellites
3.700 - 4.200	G/NG	Broadcast/Fixed Satellites Space-Earth.

FREQUENCY RANGE (Ghz.)	USER	USE
4.400 - 4.700	G	Communication Satellites Earth-Space
5.250 - 5.255	G/NG	Space Research. Secondary: Radio Navigation Satellites
5.650 - 5.725	G/NG	Space Research: Deep Space.
5.725 - 5.925	NG	Fixed Satellite. Earth-Space.
5.925 - 6.425	NG	Broadcast Satellites. Earth-Space.
7.250 - 7.750	G	Fixed Satellite/Secondary: METSAT. Space-Earth.
7.900 - 8.400	G	Fixed Satellites. Both Ways.
8.400 - 8.500	G/NG	Space Research.Space-Earth
8.550 - 8.650	G	Secondary: Radio NAVSAT.
9.500 - 9.800	G	Secondary: Radio NAVSAT.
10.950 - 11.200	NG	Fixed Satellite. Space-Earth.
11.450 - 12.200	NG	Fixed Satellite/Broadcast. Space-Earth.
12.500 - 12.750	NG	Fixed Satellite. Earth-Space.
13.250 - 14.200	G/NG	Fixed Satellite/Broadcast/Radio Navigation Satellite. Earth-Space. NASA deep space research and data relay.
14.000 - 14.500	G/NG	Fixed satellite/Radio NAVSAT Earth-Space.
14.400 - 15.350	G	NASA deep space research and data relay
15.250 - 15.350	G/NG	Space Research. Earth-Space.
17.700 - 22.000	NG	Fixed Satellite/Earth Exploration Satellites. Space-Earth.
31.00 - 31.30		Space Research
31.50 - 32.30		Space Research
34.20 - 35.20		Space Research
40.00 - 41.00	NG	Fixed Satellite:Space-Earth.
43.00 - 48.00		Maritime/Aero, Comm/Nav.
50.00 - 51.00	NG	Fixed Satellite: Earth-Space.
54.25 - 58.20	G/NG	Satellite to Satellite relay.
59.00 - 64.00	G/NG	Satellite to Satellite relay.
66.00 - 71.00		Maritime/Aero, Comm/Nav.
92.00 - 95.00	G/NG	Fixed Satellite: Earth-Space.
95.00 - 101.00		Maritime/Aero, Comm/Nav.
102.00 - 105.00		Fixed Satellite: Space-Earth.
105.00 - 130.00		Satellite to Satellite Relay.
140.00 - 142.00		Fixed Satellite: Earth- Space.
142.00 - 150.00		Maritime/Aero, Comm/Nav.
150.00 - 152.00		Fixed Satellite: Space-Earth.
170.00 - 182.00		Satellite to Satellite Relay.
185.00 - 190.00		Satellite to Satellite Relay.
190.00 - 200.00		Maritime/Aero, Comm/Nav.
220.00 - 230.00		Fixed Satellite, no direction specified.
250.00 - 265.00		Maritime/Aero, Comm/Nav.
265.00 - 275.00		Fixed Satellite, no direction specified.

Notes:

Telecommand- Command and control messages sent from ground stations to a satellite or manned vehicle to initiate, modify or terminate functions of the equipment on board the spacecraft.

Telemetry- Radio data relating to the satellites operational status or data relative to measurements being taken by the spacecraft.

Satellite Mobile- Any ground or air communications to a satellite which is moving or which transmits from an unspecified point.

Fixed Satellite- Any satellite that is fixed in stationary position(i.e. geostationary orbit).

NG - Non government use of the frequency band.

G - Government use of the frequency band.

Note 1- For measurement of the differential Faraday effect.

Note 2- Space subauthorization between space stations (Telemetry/ Tracking) 401-402 Mhz.

NEW MEMBERS LIST

AL 022 DARSEY, REED;PO BOX 2123;MOBILE, AL 36652
AZ 045 TOCKTON, DAVID; E JOAN D'ARC;PHOENIX, AZ 13830
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CALA493 FRITZ, DONALD J;7831 SIXTH ST;DOWNEY, CA 90241
CALA494 COCKERHAN, JOHN H;13909 SUMMER AVE;NORWALK, CA 90650
CAOR241 WILDMAN, HELEN D;P.O. BOX 2353;NEWPORT BEACH, CA 92662
CAOR242 SANDSTROM, ROBERT W* ADDRESS WITHHELD BY REQUEST
CAOR243 OOSTDYK, CHARLIE;PO BOX 1762;COSTA MESA, CA 92626
CARI047 THIERY, RICHARD G;44-260 MONROE NO 18;INDIO, CA 92201
CARI048 SLABACK, CHAS F;42281 STETSON;HEMET, CA 92343
CASZ004 HAYCOCK, K;5100 LOCUST AVE;CARMICHAEL, CA 95608
CT 064 MESERVE, J* ADDRESS WITHHELD BY REQUEST
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IN 066 BOWERS, THOMAS;713 EAST 10TH;RUSHVILLE, IN 46173
MI 118 FYZOHA, MICHAEL;3366 EASTERN AVENUE,;ROCHESTER, MI 48063
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NH 021 SWITZER, CHARLES W 3RD;RFD BOX 110;HILL, NH 03243
NJ 156 DALY, JOHN J JR;169 BAIER AVE APT 41;SOMERSET, NJ 08873
NJ 157 SOUSTRUENIK, FRANK L;P.O. BOX 1943;NEWARK, NJ 07101
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NY 216 COOPTER, RONALD T.;23 SUELLEN DRIVE;ROCHESTER, NY 14609
OH 133 WHITE, BURLESON D;24511 S WOODLAND RD;BEACHWOOD, OH 44122
OH 134 KOLBMANN, HUGH M JR;24566 BAGLEY RD;
COMSTED TOWNSHIP, OH 44138
PA 169 BENJAMIN, RONALD E;P.O. BOX 8701;PITTSBURG, PA 15221
WI 056 ANDERSON, STANLEY F;409 SABIN ST;SPRING VALLEY, WI 54767
CANA087 SALENIUS, MATT;2106 RONSARD ST;LAVAL, QUE CANADA H7S1R1

SHORT LIST THIS MONTH DUE TO ILLNESS OF THE
COMPUTER PROGRAMMER..... SORRY

1 OWEN BROWN RD
- OAKMONT DR
- CLAYMONT DR
- TEAKWOOD RD
- HONEYWOOD RD
- KENTER AVE
- HANLEY AVE

2 DEERBROOK LN
- TIGERTAIL RD
- CANNA RD
- LINE OF SIGHT FROM INTERSECTION OF CANNA RD & SKY LN TO INTERSECTION OF CHALON RD & BUNDY DR
- CHALON RD
- CHALON FIRE RD

3 CROWN DR
- TIGERTAIL RD
- KENTER AVE

4 STONE CANYON RD
- LINE OF SIGHT TO BEL AIR RD
- BEL AIR RD
- SANDAL LN
- CRATER LN
- BEVERLY GLEN BLVD

5 GREENDALE DR
- N FARING RD
- BROOKLAWN DR
- CAROLWOOD DR
- HANOVER DR

6 BEVERLY DR
- CHALON RD

7 BELLAGIO RD
- BELLAGIO WY

8 ROCKINGHAM AVE

9 GRETNA GREEN WY

10 GRANVILLE AVE
- KEARSARGE ST
- WESTGATE AVE
- MONTANA AVE

11 BARRINGTON PL

12 LE CONTE AVE

13 LINBROCK DR
- GLENDON AVE

14 MALCOLM AVE
- OHIO AVE
- SELBY AVE

15 THAYER AVE

16 MONTANA AVE
- WESTGATE AVE

17 ARMACOST AVE

18 SANTA MONICA BLVD

19 WESTGATE AVE
- OHIO AVE

20 BROCKTON AVE

21 MISSOURI AVE

22 NEBRASKA AVE
- BUNDY DR
- NEBRASKA AVE

23 FEDERAL AVE

24 SEPULVEDA BLVD

25 BARRINGTON AVE

26 CENTURY PARK EAST

27 CREST DR
- PICO BLVD
- CREST DR
- ALCOTT ST
- DURANGO AVE
- AIRDROME ST
- CANFIELD AVE

28 BEVERWIL DR
- PICO BLVD
- CASTELLO AVE
- CASTELLO PL
- LINE OF SIGHT FROM CASTELLO PL TO ROXBURY DR
- ROXBURY DR
- LINE OF SIGHT FROM ROXBURY DR TO FLOOD CONTROL CHANNEL IN LINE WITH SAWYER ST
- FLOOD CONTROL CHANNEL TO BEVERLYWOOD ST

29 ROBERTSON BLVD

30 BEVERLYWOOD ST
- CASTLE HEIGHTS AVE
- CATTARAUGUS AVE
- OAKHURST AVE
- KINCARDINE AVE

31 CLUB DR
- KINCARDINE AVE
- CASTLE HEIGHTS AVE

32 24TH ST
- CANFIELD AVE
- NATIONAL BLVD

53 LA CIENEGA AVE

Reporting District Map of

West L. A. Area

★ 1663 BUTLER AVE.

Cartography and Visual Aids Unit
Planning and Research Division, LAPD

MARCH 1978

NEWS

The R.C.M.A. Board is taking this opportunity to answer the many letters of inquiry we have had on the following topics.

MEMBERSHIP CARDS AND BADGES

The R.C.M.A. has no badges, decals, or membership cards for sale or distribution. The label on your newsletter is your membership card. Other clubs may have several gimmics or commercial good deals. Our good deal is the newsletter, which you as members get to write.

MEMBERSHIP RENEWAL DATE

The date printed by your membership number on your label shows the last month of your current membership. You should renew by this date to insure continuous reception of the newsletter.

Several misunderstandings have occurred due to the fact the newsletter we mail this month is carrying a cover date of next month. The advanced date is used to allow USPS to deliver your newsletter to you on time. Your letter is mailed approximately four days after the monthly board meetings.

PRORATED MEMBERSHIPS

To save postage and other complications, if your original membership application was not accompanied by the correct amount. You received a prorated membership label of less than 12 months. Please do not send in the extra amount to finish the year, just renew when your prorated date comes up.

SPECIAL FREQUENCY REQUESTS

Contact your local R.C.M.A. group for frequencies in your area or use the contact column of the newsletter. We are not yet set up for a national distribution of frequencies. We have discussed this possibility, but the current logistics of the newsletter has stopped us. Ultimately the big picture would include copies of the F.C.C. and I.R.A.C. data bases, a fast computer, and software to select and sort in any order. e.g. Frequencies along route 66 from Chicago to Tulsa in order of the cities passed. Should anyone want to bluesky on this announce your intentions in the Contact Column. We will get there. The Auto Club can plan a road trip, we should be able to give you a frequency map someday....

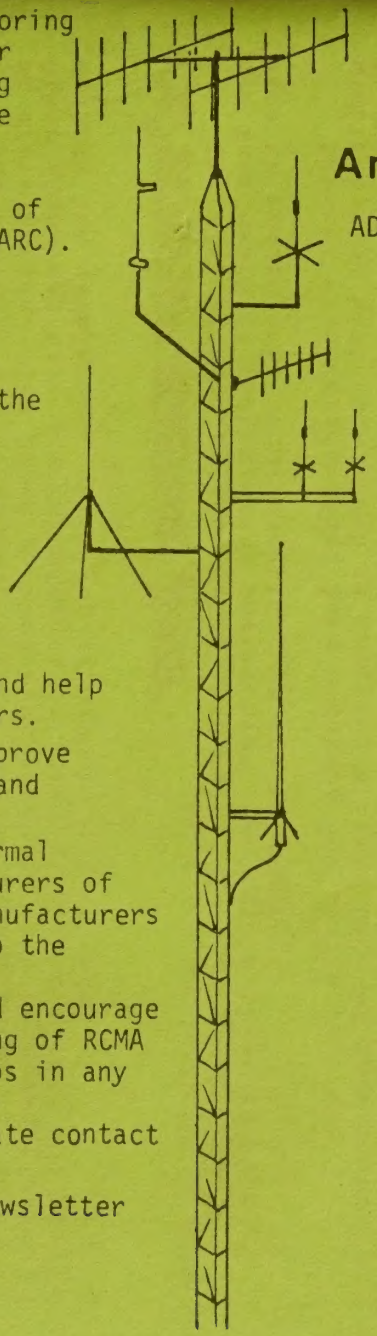
MATERIAL FOR EDITORS

Please send frequency reports and comments directly to the appropriate editor. Until we get the big data base system, the use of a central distribution P.O. Box for everything has lots of delays.

The Radio Communications Monitoring Association is a radio club for persons interested in listening to two-way communications above 30 MHz as a hobby. RCMA was founded in May 1975 and is a Full Member of the Association of North American Radio Clubs (ANARC).

The goals of RCMA are:

1) To provide a fraternity for those who seriously pursue the hobby of monitor radio listening.
2) To try to be knowledgeable about two-way radio systems and operations.
3) To promote an understanding of the legal and ethical uses of monitor receivers.
4) To share information with and help other monitor radio listeners.
5) To try to understand and improve receivers, antenna systems and related equipment.
6) To offer suggestions and formal recommendations to manufacturers of monitor receivers and to manufacturers of other products related to the hobby.
7) To offer suggestions for and encourage the organizing and conducting of RCMA meetings and tours for groups in any geographic area.
8) To encourage and to facilitate contact between members.
9) To publish a regular club newsletter devoted to the hobby.



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